OMB 0990-0115

PART I - THE SCHEDULE SECTION A - SOLICITATION FORM Request for Proposal No. AHRQ-06-0009

Date Issued: May 18, 2006 Date Questions Due: June 1, 2006 Date Proposals Due: June 30, 2006

Time Due: 12 noon local time

You are invited to submit a proposal to the Agency for Healthcare Research and Quality (AHRQ) for Request for Proposal (RFP) No. AHRQ-06-0009, entitled "Healthcare Cost & Utilization Project (HCUP)." Your proposal must be developed and submitted in accordance with the requirements and instructions of this RFP.

A cost reimbursement, completion type contract is contemplated. There is a base period of three years with one two-year option. There are also several options which may be exercised at award, at a later date, or not at all. All options will be evaluated. Some options must be priced out in the proposal and some will be unpriced. The unpriced options will be negotiated separately if and when the option is exercised.

For this acquisition, the AHRQ recommended goal (as a percentage of total planned subcontracting dollars for the base period) is 30% for Small Businesses, which shall include at least 5% (as a percentage of total contract value for the base period) for Small Disadvantaged Businesses, at least 5% (as a percentage of total planned subcontract dollars for the base period) for Women-Owned Small Businesses, and at least 3% (as a percentage of total planned subcontract dollars for the base period) for HUBZone Small Businesses and at least 3% (as a percentage of total planned subcontract dollars for the base period) for Veteran-Owned Small Businesses. These goals represent AHRQ's expectation of the minimum level for subcontracting. The North American Industry Classification System (NAICS) code that best describes the requirement is 541519. The small business size standard is \$6.5 million.

Offerors shall submit the following:

- A. Technical Proposal (See Section L.10) (Original and 11 copies)
- B. Past Performance Information (See Section L.11) (Original and 5 copies)
- C. Small Disadvantaged Business Participation Plan (See Section L.12) (Original and 2 copies)
- D. Business Proposal (See Section L.13) (Original and 5 copies)
 The Small Business Subcontracting Plan should be submitted as a separate section of the Business Proposal. (This does not apply to small business concerns).

PLEASE NOTE: In addition to the hard copies noted above, one electronic copy of the proposal needs to be submitted to the Contracting Officer at sharon.williams@ahrq.gov

Your technical proposal must be concisely written and should be limited to **250 typewritten pages** (double-spaced), exclusive of personnel qualifications (i.e., resume, etc., see Section L.10 for additional details). This limitation is for administrative purposes only and exceeding the limitation shall not, of itself, be considered a basis for rejection of your proposal.

Your proposal must provide the full name of your company, the address, including county, Tax Identification Number (TIN), DUN and Bradstreet No., and if different, the address to which payment should be mailed.

YOUR ATTENTION IS CALLED TO THE LATE PROPOSAL PROVISIONS PROVIDED IN SECTION L.3 OF THIS RFP. YOUR ATTENTION IS ALSO DIRECTED TO THE TECHNICAL PROPOSAL INSTRUCTIONS PROVIDED IN SECTION L.9 OF THE SOLICITATION.

If you intend to submit a proposal in response to this solicitation, please inform the Contracting Officer of your intent by completing the Proposal Intent Response Form (Attachment 4 to this solicitation) and send it to the Contracting Officer no later than June 1, 2006. You may send it to the address below or fax it to 301-427-1740.

Questions regarding this solicitation shall be received in this office no later than June 1, 2006 (See Section L.6). It is preferred that all questions be submitted electronically by e-mail to Sharon Williams, Contracting Officer at the following email address: Sharon.williams@ahrq.hhs.gov. Otherwise, please address your written questions to Sharon Williams, Contracting Officer, Agency for Healthcare Research and Quality, 540 Gaither Road, Rockville, Maryland 20850 and the envelope should be marked "Proposal Questions RFP No. AHRQ-06-0009."

Answers to questions will be provided in the form of an Amendment to this solicitation and will be posted on AHRQ's web page: www.ahrq.gov under "Funding Opportunities," "Contract Solicitations" and Federal Business Opportunities web page: www.fedbizopps.gov. It is your responsibility to monitor the web sites where the RFP will be posted to learn about any amendments to the solicitation.

<u>Discussions with any other individual outside the Division of Contracts Management, may result in rejection of the potential offeror's proposal.</u>

The proposal shall be signed by an authorized official to bind your organization and must be received in our Contracts Office no later than **12 noon**, local prevailing time, on **June 30, 2006**. Your proposal must be mailed to the following address:

Agency for Healthcare Research and Quality Division of Contracts Management 540 Gaither Road Rockville, Maryland 20850

Hand carried proposals may be dropped off at the above location. However, please allow ample time as proposals cannot be accepted until they have gone through security. We will not be held responsible for any delays that may be incurred getting your proposal through security.

NOTE:

The U.S. Postal Service's "Express Mail" <u>does not</u> deliver to our Rockville, Maryland address. Packages delivered via this service will be held at a local post office for pick-up. <u>The Government will not be responsible for picking up any mail at a local post office</u>. If a proposal is not received at the place, date, and time specified herein, it will be considered a "late proposal."

The RFP does not commit the Government to pay any cost for the preparation and submission of a proposal. It is also brought to your attention that the Contracting Officer is the only individual who can legally commit the Government to the expenditure of public funds in connection with the proposed acquisition.

In accordance with Federal Acquisition Circular (FAC) 2001-16, all contractors must be registered in the central contractor registration (CCR) database in order to conduct business with the government [See Section I - FAR clause 52.204-7 Central Contractor Registration (OCT 2003), Alternate 1 (Oct 2003)] . As stated in paragraph (h) of this clause, additional information can be obtained at http://www.ccr.gov or by calling 1-888-227-2423, or 269-961-5757.

<u>REFERENCE MATERIALS:</u> Offerors are directed to information about the HCUP procurement at http://www.ahrq.gov/fund/contarchive/rfp060009.htm. Offerors are directed to www.hcup-us.ahrq.gov for general information about HCUP.

Requests for any information concerning this RFP should be referred to Sharon Williams, (301) 427-1781.

Sincerely,

Sharon Williams Contracting Officer Agency for Healthcare Research and Quality

TABLE OF CONTENTS

	<u>Pages</u>
Solicitation Table of Contents	1-3
	4 5-9
	10
·	10
	10
•	11-23
	24-26
Special Contract Requirements	27-31
Contract Clauses	31-36
List of Attachments	37
Representations and Instructions	38-44
Instructions, Conditions & Notices to Offerors	45-73
Evaluation Factors for Award	74-77
	Table of Contents Supplies or Services & Prices/Costs Description/Specification/Work Statement Packaging and Marking Inspection and Acceptance Deliveries or Performance Contract Administration Data Special Contract Requirements Contract Clauses List of Attachments Representations and Instructions Instructions, Conditions & Notices to Offerors

Attachments

- 1. Past Performance Questionnaire and Contractor Performance Form
- SF LLL-A, Disclosure of Lobbying Activities
 Proposal Intent Response Sheet
 Small Business Subcontracting Plan 2.
- 3.
- 4.

SECTION B-SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 BRIEF DESCRIPTION OF SUPPLIES OR SERVICES

"Healthcare Utilization and Cost (HCUP)." See Section C (Attachment 1) for a complete description.

B.2. ESTIMATED COST

Performance

Year 4 9/27/09-9/26/10 Cost

- a. The estimated cost (exclusive of fees) for performance of the work under this contract, including direct and indirect costs is \$ (TO BE NEGOTIATED)
- b. The fixed fee for this contract is \$ (TO BE NEGOTIATED). The fixed fee shall be paid in installments based on the percentage of completion of work, as determined by the Contracting Officer. Payment shall be subject to the withholding provisions of the Clause ALLOWABLE COST AND PAYMENT and FIXED FEE incorporated herein.
- c. The Government's maximum obligation, represented by the sum of the estimated cost plus the fixed fee is as follows:

(TO BE NEGOTIATED) Base **Total Estimated** Period of Estimated Fixed Cost Plus Fixed Fee Performance Cost Fee Year 1 9/27/06-9/26/07 Year 2 9/27/07-9/26/08 Year 3 9/27/08-9/26/09 TOTAL **Option to Continue Base Effort** Period of Estimated Fixed **Total Estimated**

Fee

Cost Plus Fixed Fee

Year 5 9/27/10-	
9/26/11	
	5 – Evaluate the Collection, Processing, Documentation and hods for State Databases
Delivery Met	nodo for otate batabases
Estimated Cost:	\$
Fixed Fee: Total Cost and Fee:	\$
Total Cost and Fee:	\$
	4 – Evaluate the Processing, Documentation, and
Dissemination	on Procedures
Estimated Cost:	\$
Fixed Fee:	\$
Total Cost and Fee:	\$
Option –Task C.11-	C.11.9 – Multi-State and Nationwide Outpatient Databases
Estimated Cost:	\$
Fixed Fee:	\$
Total Cost and Fee:	\$
Option –Task C.12-	C.12.7 – New Specialized Discharge-Level Database
Estimated Cost:	\$
Fixed Fee:	\$
Total Cost and Fee:	\$
Option –Task C.14-	C.14.3 – HCUP Supplemental/Linkable Files
Estimated Cost:	\$
Fixed Fee:	\$
Total Cost and Fee:	\$
Option - Task C.15	.8 – Exhibit Booth Representation
Estimated Cost:	\$
Fixed Fee:	\$
Total Cost and Fee:	\$

Tracking/Distribution System Estimated Cost: Fixed Fee: Total Cost and Fee: \$ Option - Task C.18-C.18.8 - Improving HCUP Data Through Technical Support for <u>Partners</u> Estimated Cost: \$_____ Fixed Fee: Total Cost and Fee: \$_____ Option -Task C.19.3 - Provide Information to AHRQ on Advances in Health Care Information Technology (HIT) Relevant to HCUP Estimated Cost: Fixed Fee: Total Cost and Fee: \$_____ Option –Task C.21-C.21.6.2 – Develop Educational Presentations and Training <u>Materials</u> Estimated Cost: Fixed Fee: Total Cost and Fee: \$ Option -Task C.22.3 - Create New Software Tools Estimated Cost: Fixed Fee: Total Cost and Fee: \$ Option - Task C.23.2 - Write Descriptive and Analytic Reports for Multiple HCUP <u>Series</u> Estimated Cost: Fixed Fee: Total Cost and Fee: \$_____

Option -Task C.15.9 - Evaluation of Dissemination Processes and

Optioi	n – rask C.23.3	5 – Assess All Report Series and Recommend an Overali Plan
Fixed		\$ \$
Total (Cost and Fee:	\$
<u>Optio</u>	n –Task C.24 –	Increase Use of and Impact From HCUP Through Outreach
Fixed	ated Cost: Fee: Cost and Fee:	\$ \$ \$
<u>Optio</u>	n – Task C.25 -	- Translation of Data for Use by Surveillance Data Systems
Price t	o be negotiated	d if option is exercised.
<u>Optio</u>		Expansion of HCUP Outpatient Data to Improve Geographic aphic Representation and to Improve Timeliness of HCUP
Price t	o be negotiated	d if option is exercised.
<u>Optio</u>		- Improving Timeliness of HCUP Information Through Near
	Real-Time St	reaming of Data from State Data Organizations
Price t	o be negotiated	d if option is exercised.
d.	BE NEGOTIA	urrently available for payment and allotted to this contract are \$(TO TED) of which \$ (TO BE NEGOTIATED) represents the estimated which \$(TO BE NEGOTIATED) represents the fixed fee.
e.		that the amount currently allotted will cover performance of the gh (TO BE NEGOTIATED).
f.	concurrence of LIMITATION (ng Officer may allot additional funds to the contract without the of the Contractor. For further provisions on funding, see the OF COST/LIMITATION OF FUNDS and the ALLOWABLE COST NT (AND FIXED FEE) clauses incorporated herein.
g.	COST AND Pocontract.	AYMENT (AND FIXED FEE) clauses incorporated into this
B.3	PROVISIONS	APPLICABLE TO DIRECT COSTS
a.		vable Unless Otherwise Provided Notwithstanding the clauses, COST AND PAYMENT, and FIXED FEE, incorporated into this

contract, unless authorized in writing by the Contracting Officer, the costs of the

following items or activities shall be unallowable as direct costs:

- (1) Acquisition, by purchase or lease, of any interest in real property;
- (2) Rearrangement or alteration of facilities;
- (3) Purchase or lease of any item of general purpose-office furniture or office equipment regardless of dollar value. (General purpose equipment is defined as any items of personal property which are usable for purposes other than research, such as office equipment and furnishings, pocket calculators, etc.);
- (4) Accountable Government property (defined as both real and personal property with an acquisition cost of \$1,000 or more, with a life expectancy of more than two years) and "sensitive items" (defined and listed in the Contractor's Guide for Control of Government Property, 1990, regardless of acquisition value;
- (5) Travel to attend general scientific meetings;
- (6) Foreign Travel;
- (7) Any costs incurred prior to the contract's effective date;
- (8) Rental of meeting rooms not otherwise expressly paid for by the contract;
- (9) Any formal subcontract arrangements not otherwise expressly provided for in the contract
- (10) Consultant fees in excess of \$1,000/day; and
- (11) Information Technology hardware or software.
- b. This contract is subject to the provisions of Public Law (P.L) 99-234 which amends the Office of Federal Procurement Policy Act to provide that contractor costs for travel, including lodging, other subsistence, and incidental expenses, shall be allowable only to the extent that they do not exceed the amount allowed for Federal employees.

The Contractor, therefore, shall invoice and be reimbursed for all travel costs in accordance with Federal Acquisition Regulations (FAR) 31.205-46.

SECTION C/ STATEMENT OF WORK

DESCRIPTION/SPECIFICATION/WORK STATEMENT

The Statement of Work is located at Attachment 1.

SECTION D - PACKAGING AND MARKING

Not Applicable

SECTION E - INSPECTION AND ACCEPTANCE

E.1 INSPECTION AND ACCEPTANCE

- a. The contracting officer or the duly authorized representative will perform inspection and acceptance of materials and services to be provided.
- b. For the purpose of this SECTION the Government Project Officer is the authorized technical representative of the contracting officer.
- c. Inspection and acceptance will be performed at:

Agency for Healthcare Research and Quality 540 Gaither Road Rockville, Maryland 20850

E.2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates the following clause by reference, with the same force and effect as if it were given in full text. Upon request, the Contracting Officer will make its full text available.

FAR Clause No.

Title and Date

52.246-5 Inspection of Services-Cost Reimbursement (April 1984)

SECTION F - PERIOD OF PERFORMANCE AND DELIVERY SCHEDULE

F.1 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates the following clause by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

FEDERAL ACQUISITION REGULATION (FAR) (48 CFR CHAPTER 1) CLAUSES

FAR Clause No.

Title and Date

52.242-15

Stop Work Order (AUG 1989) Alternate I (APRIL 1984)

F.2 PERIOD OF PERFORMANCE

The Government anticipates the period of performance shall begin on or about September 27, 2006 and run through September 26, 2009 with one two-year option (if exercised) from September 27, 2009 through September 26, 2011.

F.3 DELIVERY SCHEDULE

The items specified for delivery below are subject to the review and approval of the Project Officer before final acceptance. The Contractor shall be required to make revisions deemed necessary by the Project Officer.

The Contractor shall produce the following scheduled reports/deliverables in the amount, and within the time frame indicated.

Healthcare Cost and Utilization Project (HCUP) Deliverables

effective date of this contract (edoc). tbd – to be determined

Quantity – as specified in the scope of work

Deliver- able Number	Task Number	Deliverable Description	Due Date*
To be assigned			
	C.4	Computer Quality Assurance deliverable	2 months edoc
	C.6	Transition Plan- Draft	2 weeks edoc
	C.6	Transition Plan- Final *	4 weeks edoc
	C.7.1.1	Use and maintenance of Recruitment Database	On-going
	C.7.1.2	Create and maintain e-mail list of HCUP Partners and organization members	3 months edoc
	C.7.1.3	Provide support for conference calls for data acquisition activities	As needed

Deliver-			
able Number	Task Number	Deliverable Description	Due Date*
	C.7.1.4	Update the Annual Activities Report	Annually, February 1st
	C.7.1.4	Update the HCUP Overview Binder	Annually, March 1 st
	C.7.1.4	Update Partner-Specific Requirements Report	As needed
	C.7.3.1	Update Partner Contact lists	At least quarterly
	C.7.3.2	Update of Data Inventory	Annually
	C.7.3.2	Maintenance of Data Inventory	On-going
	C.7.4.1	Update to Partner data availability to the Recruitment Database and the Data Inventory	Annually, May 1 st
	C.7.4.2	Update Sample MOA	Annually, May 1 st
	C.7.5.1	Draft Feasibility Study to identify potential Partner organizations	Annually, December 15 th
	C.7.5.1	Final Feasibility Study to identify potential Partner organizations	Annually, January 15 th
	C.8.1	Draft proposal for design of the new processing program	6 months from edoc
	C.8.1	Final design of the new processing program	8 months from edoc
	C.8.1	Memo detailing annual updates to the processing program	Annually, March 1 each year
	C.8.2	Memo of initial check of the source data and recommendations on data mapping	1 week after receipt of the source data
	C.8.3	Memo reviewing existing HCUP quality control edits	After processing of 1 st year data
	C.8.4	Creation of SID/SASD/SEDD data files	1 month after receipt of the data
	C.8.4	Rotavirus data files for the first half of the states	tbd
	C.8.4	Rotavirus data files for the remaining states with documentation.	tbd
	C.8.4	Log of reprocessing	In tandem with annual updates to the processing program
	C.8.4	Creation of Central Distributor SID/SASD/SEDD data files	2 weeks after state files are prepared for AHRQ, or within 2 weeks after receipt of signed MOA, whichever occurs later
	C.8.4	Central Distributor Customized files	2 weeks after AHRQ request
	C.8.5	Documentation for intramural and Central Distributor SID/SASD/SEDD data files (including corresponding binder material)	2 weeks after creation of the data file

Deliver- able Number	Task Number	Deliverable Description	Due Date*
	C.8.6	Copy of data files and documentation to states	1 month after creation of the data
	C.8.6	Data quality report template	Year 1 before the Partners Meeting
	C.8.6	Data quality report and summary statistics for each state	Starting in year 2, in tandem with copy of data files and documentation to states
	C.8.6	Copy of data files to AHRQ	2 weeks after creation of the data file and documentation
	C.8.6	Memo that details alternate methods of delivery and storage of HCUP data	Year 1
	C.8.6	Processing programs posted on www.hcup-us.ahrq.gov ,	8 months after edoc and annually thereafter
	C.8.6	Summary statistics posted on www.hcup-us.ahrq.gov	2 weeks after creation of the data file and documentation for each state
	C.8.7	Physician data files delivered to AHRQ, documentation and summary statistics as well as progressing programs posted on HCUP-US	tbd
	C.8.7	Memo discussing how to incorporate the National Provider Identifier file to HCUP	Year 3
	C.8.8	Evaluate the SID/SASD/SEDD processing, documentation and dissemination procedures	June 2009
	C.9.1	NIS Verification of Restrictions memo – beginning with the 2005 NIS	Annually starting year 1 after NIS processing and prior to NIS dissemination
	C.9.1	NIS database, documentation, and tools for external release in ASCII (SAS version also provided for internal AHRQ use)	Annually each June
	C.9.1	NIS database for intramural use only, including data development variables and documentation	Annually each June
	C.9.2	NIS processing programs	Annually each June
	C.9.2	NIS comparison report	2 months after MedPAR data become available

Deliver- able Number	Task Number	Deliverable Description	Due Date*
	C.9.3	Evaluate the NIS sampling and weighting strategy	December 2007
	C.9.3 C.10.2	Evaluate the NIS and KID processing, documentation and dissemination procedures – one time only	October 2007
	C.10.1	KID Verification of Restrictions memo	No later than 1 month prior to release of KID
	C.10.1	KID database, documentation, and tools for external release in ASCII (SAS version also provided for internal AHRQ use)	June, 2008 June, 2011
	C.10.1	KID processing programs	June, 2008 June, 2011
	C.10.1	KID comparison report	No later than December 31, 2008 and December 31, 2011
	C.10.2	Intramural KID including all pediatric discharges from all hospitals and data development variables	June, 2008 June, 2011
	C.11.1	Multi-state emergency department visits file	Annually, 3 weeks after processing final SEDD
	C.11.1	Multi-state ambulatory surgery file	Annually, 3 weeks after processing final SASD
	C.11.2	Comparison report for multi-state emergency department visits file	Annually, 3 weeks after delivery of multi-state ED visits file
	C.11.2	Comparison report for multi-state ambulatory surgery file	Annually, 3 weeks after delivery of the multi-state ambulatory surgery file
	C.11.3	Interim report describing design recommendations for NEDD	January, 2008
	C.11.3	Final report including interim report and results of comparison with other data for the NEDD	April, 2008
	C.11.3	Interim report describing design recommendations for NHASD	January, 2010
	C.11.3	Final report including interim report and results of comparison with other data for the NHASD	April, 2010
	C.11.4	1 st NEDD and documentation	September 15, 2008

Deliver-	Task		
able Number	Number	Deliverable Description	Due Date*
	C.11.4	Annual release of the NEDD and documentation	July, 2009 July, 2010 July, 2011
	C.11.4	1 st NEDD and documentation	September 15, 2010
	C.11.4	Annual release of the NEDD and documentation	June, 2011
	C.12.1	Interim report design recommendations for Specialized Hospital Discharge-Level Database	January 31, 2009
	C.12.1	Final report including interim report and results of comparison with other Specialized Hospital Discharge-Level Database	April 30, 2009
	C.12.7	Specialized Hospital Discharge-Level Database files and documentation	September 15, 2009
	C.13.1	Execute annual AHA agreement and purchase data	Annually, 2 weeks after AHA file available for next data year needed by the project
	C.13.1	Memorandum/Correspondence Documenting Survey Changes	2 weeks after receiving AHA Survey file
	C.13.1	AHA Analytic File	6 months after receipt of AHA survey files
	C.13.1	Consolidated Crosswalk file with documentation	2 weeks after all state-level crosswalk files have been created
	C.13.2	Summary Tables to Compare AHA/State Data	2 weeks after all state-level crosswalk files created
	C.13.3	Hospital Status Changes File	4 months after receipt of AHA survey files
	C.13.4	Document AHA Analytic File for Web site: Annotated survey instrument, Variables, Changes, Summary Statistics	6 months after receipt of AHA survey files
	C.13.4	Survey Notebook (hard copy) of Analytic File documentation	8 months after receipt of AHA survey files

Deliver- able Number	Task Number	Deliverable Description	Due Date*
	C.14.1	Obtain CMS accounting database and advise on changes in database contents or structure	Annually, 2 weeks after CMS makes available the June or September database
	C.14.1	Create CCR intramural file and documentation for testing and review at AHRQ	3 months after obtaining CMS accounting database
	C.14.1	Supply CCR files and documentation for NIS and CD-SID	2 months after completion of the intramural CCR
	C.14.1	Create CCR file for the KID 2006	2009 - 2 months after completion of the corresponding intramural CCR or 2 weeks after KID release, whichever is later
	C.14.2	Draft plan detailing development of readmission/revisit variables for Partners with person identifier	6 months after edoc
	C.14.2	Final plan detailing development of readmission/ revisit variables for Partners with person identifier	3 weeks after AHRQ review
	C.14.2	Partner workgroup with Partners collecting and supplying reliable person identifier to the HCUP	Begin once plan complete. Bi- monthly thereafter
	C.14.2	Implementation of plan to produce readmission / revisit variables on HCUP intramural state files	Begin approach in data year 2006, implementation in data year 2007
	C.14.2	Draft plan detailing variation of readmission/ revisit variable for Partners without person identifier	18 months after edoc
	C.14.2	Final plan detailing variation of readmission/ revisit variable for Partners without person identifier	3 weeks after AHRQ review
	C.14.2	Partner workgroup, Partners not currently produce a patient level link	Begin once plan complete. Bi- monthly thereafter
	C.14.2	Implementation of plan to aid Partners to produce either a patient identifier or a derivative readmission / revisit variables on their source data	Begin approach in data year 2008, implementation in data year 2009
	C.14.2	Create 2 nd and 3 rd datasets or linkable files each Year beyond the CCR files	Annually each year, timing tbd

Deliver- able Number	Task Number	Deliverable Description	Due Date*
	C.14.3	Draft - Annual Memo Recommendations for Additional Data or Linkable files (2 in Year 1, 1 per year in remainder of contract)	4 months after edoc, and annually thereafter
	C.14.3	Final - Annual Memo Recommendations for additional linkable files	Every 6 months
	C.15.1	Report Summarizing Revenues from Nationwide Databases	6 months after edoc, and annually thereafter
	C.15.2	Electronic notification that updates have been made (tracking system)	Ongoing
	C.15.2	Electronic copy of tracking system content	11 months after edoc, annually thereafter
	C.15.3	Draft SID/SASD/SEDD Application Kits	6 months edoc, and annually thereafter
	C.15.3	Final SID/SASD/SEDD Application Kits	2 weeks after AHRQ comments
	C.15.3	Other SID/SASD/SEDD (Draft & Final) Application Kits	tbd
	C.15.3	Draft NIS Application Kits	9 months edoc, and annually thereafter
	C.15.3	Final NIS Application Kits	2 weeks after AHRQ comments
	C.15.3	Draft KID Application Kits	tbd
	C.15.3	Final KID Application Kits	tbd
	C.15.5	Draft Central Distributor Activity Report	Monthly
	C.15.5	Final Central Distributor Activity Report	1 week after AHRQ comments
	C.15.6	Send original DUA copies to AHRQ	Quarterly
	C.15.7	Design and create promotional material	1 week after database release
	C.15.8	Exhibit Booth Representation	tbd
	C.15.9	Draft Evaluation of Processes and Tracking Report	13 months after edoc
	C.15.9	Final Evaluation of Processes and Tracking Report	2 weeks after AHRQ comments
	C.15.9	Implement Tracking and Reporting Systems Refinements/New System	As discussed in Final report
	C.16.1.2	Source data destruction and certification	2 years after completion of database and at project conclusion
	C.16.2.1	Draft memo on Proposed File Maintenance System (naming conventions, tracking, disposition of old files)	5 months edoc

Deliver- able Number	Task Number	Deliverable Description	Due Date*
	C.16.2.1	Final memo on Proposed File Maintenance System (naming conventions, tracking, disposition of old files)	3 weeks after AHRQ review
	C.16.6	Draft HCUP Policy for Documentation and Management of Project Records	6 months edoc
	C.16.6	Final HCUP Policy for Documentation and Management of Project Records	3 weeks after delivery of draft to AHRQ
	C.17.1	Report on Web site policies and procedures	1 year edoc and 4 years edoc
	C.17.1	Posting New Pages on Web site	On-going
	C.17.1	Modifying New Pages on Web site	On-going
	C.17.4	Enhance the Web site	Up to four per year
	C.17.6	Draft HCUP-US Technical User Guide	1 year edoc and 4 years edoc
	C.17.6	Final HCUP-US Technical User Guide	3 weeks after AHRQ review at 1 year edoc and 4 years edoc
	C.18.1	Technical Support for Partners Quarterly Report	3 Month after edoc and quarterly thereafter
	C.18.3	Technical Support for Partners Needs Assessment Annual Memo	3 months after edoc 12, 24, 36, & 48 months after edoc
	C.18.6	Options for Partners to Maintain Confidentiality of Data Report	Twice yearly as requested
	C.18.6	Implement Option Selected to Maintain Data Confidentiality	Twice yearly as requested
	C.18.7	Focused Data Collection Improvement Report Design	13 & 37 months after edoc
	C.18.7	Focused Data Collection Improvement Final Report	24 & 48 months after edoc
	C.18.8	Draft Partner Technical Support Template or Tool	9, 21, 33, 45, & 57 months after edoc
	C.18.8	Final Partner Technical Support Template or Tool	12, 24, 36, 48 & 60 months after edoc
	C.19.2	Memo on technological innovations	10 months after edoc and annually thereafter

Deliver- able Number	Task Number	Deliverable Description	Due Date*
- Number	C.19.3	Written Summaries on HIT topic	1 month after edoc and Monthly thereafter
	C.19.3	Written Summary of HIT Conference/Meetings	1 month following the meeting
	C.19.3	Draft Annual HIT Summary Report	11 months after edoc, and annually thereafter
	C.19.3	Final Annual HIT Summary Report	12 months after edoc, and annually thereafter
	C.20.1	Technical support services infrastructure (staff expertise, telephone and email capacity)	1 month after edoc and on-going thereafter
	C.20.1.2	Routing protocol and list of proposed staff for addressing technical inquiries	2 months after edoc
	C.20.2	Technical support to users	1 month after edoc and ongoing thereafter
	C.20.3.3	Collection of technical support "best responses" and limited statistical tables	3 months after edoc with periodic updates thereafter
	C.20.3.4	Technical assistance Web pages and updates	1 month after edoc, with updates as needed within 2 days of request
	C.20.3.5	Feasibility study to determine the usefulness of other technology and implementation	3 years after edoc
	C.20.4.2	User impact stories	Biannually, per calendar year
	C.20.5	Publications report	Quarterly, per calendar year
	C.20.6	Maintenance of existing user database	3 months after edoc and ongoing thereafter
	C.20.6	Feasibility study for new or expanded user database	15 months after edoc
	C.20.6	New or expanded user database	3 months after AHRQ approval
	C.20.7	Technical Support and Outreach Statistics Report	Quarterly, per calendar year

Deliver- able Number	Task Number	Deliverable Description	Due Date*
	C.21.1	Update master presentations	Annually, 6 weeks prior to each presentation date
	C.21.2.1	De-identified training file - Draft proposal	8 months edoc
	C.21.2.1	De-identified training file - Final proposal	10 months edoc
	C.21.2.1	De-identified training file and documentation	13 months edoc
	C.21.2.2	Concept for 3-part Intermediate/advanced electronic courseware	27 months edoc
	C.21.2.2	Draft 3-part Intermediate/advanced electronic courseware	31 months edoc
	C.21.2.2	Final 3-part Intermediate/advanced electronic courseware	34 months edoc
	C.21.2.3	Report recommending new technologies*	46 months edoc
	C.21.2.3	Draft -New technology training tool	50 months edoc
	C.21.2.3	Final New technology training tool with documentation	53 months edoc
	C.21.3.1	Customize new presentations to suit audiences 5 annually in Years 1 and 2, 8 annually in Years 3, 4 and 5,	3 weeks prior to meeting presentation date or electronic posting date
	C.21.4.1	Written support materials for a presentation	2 weeks prior to each presentation date
	C.21.4.2	Display materials and equipment	At presentation
	C.21.5	Presentation report *	Annually
	C.21.6.1	In-person presentations and training	8 annually in Years 1 and 2. 10 annually in Years 3, 4 and 5.
	C.21.6.2	In-person booth representation	8 annually
	C.22.1	Update existing ICD-based software tools, with priority given to Co-morbidity Software	Annually, on a staggered delivery timeline with all completed by October 1 of each year
	C.22.1	Update CCS-CPT	Annually, by August 1
	C.22.2	Maintain tool development logistics memo	Year 1 and when each new tool is added

Deliver- able Number	Task Number	Deliverable Description	Due Date*
	C.22.3	Create and update new software tools	One tool for each year 2, 3, and 4
	C.23.1	Special Technical Analysis Reports	1 annually in Year 1; and 2 annually beginning in Year 2
	C.23.2.1	Fact Books – AHRQ-lead	1 annually, beginning in Year 1
	C.23.2.1	Fact Books –Contractor	1 annually, beginning in Year 2
	C.23.2.1	Statistical Briefs	9 annually, in Year 1 12 annually in Years 2 – 5
	C.23.2.2	Annual Research Report design template	May 2007
	C.23.2.2	Annual Research Report *	1 annually, completed by August of each year
	C.23.3	Overall Plan with recommended report series specifications	Second quarter, Year 2
	C.24.1.1	Plan for marketing and outreach	Annually, beginning 3 months after edoc
	C.24.1.2	Major outreach initiatives	Timed annually to correspond with best opportunities
	C.24.2.1	7 announcements	Annually, timed with event
	C.24.2.2	Quarterly HCUP newsletter	December 15, March 15, June 15 and September 15 of each year
	C.24.2.3	HCUP calendar of events for HCUP team and for public Web site	3 months after edoc and weekly thereafter
	C.24.2.4	5 new and 5 updated promotional materials	Annually, timed with event
	C.24.3	E-mail with immediate debriefing of activity	Following each outreach activity/ presentation/ training session/ booth

Deliver- able	Task	Deliverable Description	Due Date*
Number	Number	- σ σ. σ	
	C.24.3	Annual Report of HCUP Outreach Activities *	1 year after edoc, and annually thereafter
	C.28.1.2	NHQR/DR Design Memo	tbd
	0.20.1.2	TWINGTO DESIGN MEMO	tod
	C.28.2.4	AI/AN tables of rates and documentation for NHDR	January 15, 2008, 2009, 2010, 2011
	C.28.3.1	NHQR/NHDR Estimates Working Tables (excluding Al/AN tables)	September 30, 2007, 2008, 2009, 2010, 2011
	C.28.3.2	Final NHQR/NHDR Tables	January 15, 2008, 2009, 2010, 2011
	C.28.3.3	NHQR/DR Skinny files and documentation of data for Reports	August 31, 2007, 2008, 2009, 2010, 2011
	C.28.3.4	Short methods reports describing NHQR/NHDR table production	November 30, 2007, 2008, 2009, 2010
	C.28.3.4	Technical specifications report, computer programs, and program documentation for Reports	February 28, 2008, 2009, 2010, 2011
	C.28.4	List of potential special analyses	December 30, 2006, 2007, 2008, 2009, 2010
	C.28.4	Special analysis- final state report	November 30, 2007, 2008, 2009, 2010
	C.28.4	Special analysis- 5 others / year	tbd
	C.28.5.1	Partners- preview material	March 31, 2007, 2008, 2009, 2010, 2011
	C.28.5.2	Partners- briefing material	October 31, 2006, 2007, 2008, 2009, 2010
	C.28.5.3	Partners- letter to volunteer for NHQR	April 30, 2007, 2008, 2009, 2010, 2011
	C.28.5.4	Partners- send final report text for review	July 31, 2007, 2008, 2009. 2010, 2011
	C.29.3	Draft HCUP Security Plan	3 months after edoc
	C.29.3	Final HCUP Security Plan *	3 weeks after AHRQ review
	C.29.4	Draft plan for Security Audit	11 months edoc

Deliver- able Number	Task Number	Deliverable Description	Due Date*
	C.29.4	Final Security Audit Report *	13 months edoc
	C.29.4	Evaluation of HCUP Confidentiality and Security	15, 27, 39, & 51
		(memo)	months after edoc
	C.29.5	Memo documenting yearly review and update of HCUP Privacy Training Tool and HCUP DUA Training Tool	12, 24, 36, 48, & 56 months after edoc
	C.29.5	Maintain and update privacy training tools Annually	3 weeks after approval by AHRQ of review memo and yearly thereafter
	C.30.1	Project Orientation meeting and Work Plan	10 days after edoc
	C.30.1	Partners meeting	Tbd
	C.30.1	Site Visit	13 months and
			annually thereafter
	C.30.2	Draft Annual Project Management Plan	1, 11, 23, 35, & 47 months edoc
	C.30.2	Final Annual Project Management Plan *	12, 24, 36, & 48 months edoc
	C.30.3	Progress Reports *	6 weeks edoc and Monthly thereafter
	C.30.3	Estimate to Complete Report *	6, 9,18, 21, 30, 33, 42, 45, 54, 57 months edoc
	C.30.3	Project Summary Report Draft	52 months
	C.30.3	Project Summary Report Final *	57 months
	C.30.4	Close-out Transition Plan Draft	1/30/11
	C.30.4	Close-out Transition Plan Final *	1 month after AHRQ review
		Subcontracting Report for Individual Contracts (SF-294)	Annually in October and April via e-SRS
		Small Disadvantaged Business Participation Report (OF-312)	At contract completion (to the Contracting Officer)

* The Contracting Officer shall also receive <u>one copy</u> of each deliverable denoted by an asterisk.

Agency for Healthcare Research and Quality ATTN: Sharon Williams, Contracting Officer Division of Contracts Management 540 Gaither Road Rockville, Maryland 20850

SECTION G - CONTRACT ADMINISTRATION DATA

G.1 KEY PERSONNEL

Pursuant to the Key Personnel clause incorporated in Section I of this contract, the following individual(s) is/are considered to be essential to the work being performed hereunder:

NAME TITLE

(TO BE COMPLETED AT TIME OF CONTRACT AWARD)

The clause cited above contains a requirement for review and approval by the Contracting Officer of written requests for a change of Key Personnel reasonably in advance of diverting any of these individuals from this contract. Receipt of written requests at least 30 days prior to a proposed change is considered reasonable.

G.2 PROJECT OFFICER

The following Project Officer(s) will represent the Government for the purpose of this contract:

(TO BE COMPLETED AT TIME OF CONTRACT AWARD)

The Project Officer is responsible for: (1) monitoring the contractor's technical progress, including the surveillance and assessment of performance and recommending to the contracting officer changes in requirements; (2) interpreting the statement of work and any other technical performance requirements; (3) performing technical evaluation as required; (4) performing technical inspections and acceptances required by this contract; and (5) assisting in the resolution of technical problems encountered during performance.

The Contracting Officer is the only person with authority to act as an agent of the Government under this contract. Only the Contracting Officer has authority to: (1) direct or negotiate any changes in the statement of work; (2) modify or extend the period of performance; (3) change the delivery schedule; (4) authorize reimbursement to the contractor of any costs incurred during the performance of this contract; or (5) otherwise change any terms and conditions of this contract.

The Government may unilaterally change its Project Officer designation

G.3 INVOICE SUBMISSION

INVOICE SUBMISSION

Billing Instructions are attached and made part of this contract. Instructions and the following directions for the submission of invoices must be followed to meet the requirements of a "proper" payment request pursuant to FAR 32.9, and must be in accordance with the General Provisions clause 52.232-25 Prompt Payment (OCT 2003).

Invoices/financing requests shall be submitted in an original and three copies to:

Contracting Officer
Agency for Healthcare Research and Quality
Division of Contracts Management
540 Gaither Road
Rockville, Maryland 20850

G.4 INFORMATION ON VOUCHERS

G.4 INFORMATION ON VOUCHERS

- (1) The Contractor is required to include the following minimum information on vouchers:
 - (a) Contractor's name and invoice date;
 - (b) Contract Number;
 - (c) Description and price of services actually rendered;
 - (d) Other substantiating documentation or information as required by the contract;
 - (e) Name (where practicable), title, phone number, and complete mailing address or responsible official to whom payment is to be sent; and
 - (f) The Internal Revenue Service Taxpayer Identification Number.
- (2) The Contractor shall furnish the following <u>minimum</u> information in support of costs submitted:
 - (a) <u>Direct Labor</u> include all persons, listing the person's name, title, number of hours or days worked, hourly rate (unburdened), the total cost per person and a total amount of this category.
 - (b) <u>Fringe Costs</u> show rate, base and total amount as well as verification/allowability or rate changes (when applicable);
 - (c) Overhead or Indirect Costs show rate, base and total amount as well as verification/allowability or rate changes (when applicable);
 - (d) <u>Consultants</u> include the name, number of days or hours worked, a total amount per consultant and a total amount for this category;
 - (e) <u>Travel</u> include for each airplane or train trip taken the name of the traveler, date of travel, destination, the transportation costs including ground transportation, shown separately, and per diem costs. Other travel costs shall also be listed. A total amount for this category shall be provided;
 - (f) <u>Subcontractors</u> include for each subcontractor, the same data that is being provided for the prime contractor. A total number for this category shall be provided.

- (g) <u>Data Processing</u> include all non-labor costs, i.e., computer time, equipment purchase, lease or rental, data tapes, etc. A total amount for this category shall be provided.
- (h) Other include a listing of all other direct charges to the contract, i.e., office supplies, telephone, equipment rental, duplication, etc.
- (i) <u>Equipment Cost</u> itemize and identify separately from material costs including reference to approval in all cases;
- (j) <u>G&A</u> show rate, base and total as well as verification/allowability of rate changes (when applicable);
- (k) Fee show rate, base and total and;
- (I) <u>Current amount billed</u> by individual cost element and total dollar amount and cumulative amount billed by individual cost element and total dollar amount.
- (3) Payment shall be made by:

PSC Finance Parklawn Building, Room 16-23 5600 Fishers Lane Rockville, Maryland 20857 Telephone Number (301) 443-6766

G.5 INDIRECT COST RATES and FEE

In accordance with Federal Acquisition Regulation (FAR) (48 CFR Chapter 1) Clause 52.216-7(d)(2), <u>Allowable Cost and Payment</u>, incorporated by reference in this contract, in Part II, Section I, the primary contact point responsible for negotiating provisional and/or final indirect cost rates is the cognizant contracting official as set forth in FAR Subpart 42.7 - Indirect Cost Rates.

Reimbursement will be limited to the rates and time periods covered by the negotiated agreements. The rates, if negotiated, are hereby incorporated without further action of the contracting officer.

G.6 ELECTRONIC FUNDS TRANSFER

Pursuant to FAR 52.232-33, Payment by Electronic Funds Transfer - Central Contractor Registration (OCT 2003), the Contractor shall designate a financial institution for receipt of electronic funds transfer payments. This designation shall be submitted, in writing, to the finance office designated in the contract.

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1 RELEASE AND USE AND COPYRIGHT OF DATA FIRST PRODUCED FROM WORK PERFORMED UNDER THIS CONTRACT

- (a) Release and Use Data first produced in the performance of the Contract. As permitted in FAR 52.227-17, the provisions of this Section H.1 shall apply to any release or use of data first produced in the performance of the Contract and any analysis, tools, methodologies, or recorded product based on such data.
- (b) Release and Use Requirements related to confidentiality and quality. To ensure public trust in the confidentiality protections afforded participants in Agency for Healthcare Research and Quality (AHRQ)-supported research, AHRQ requires and monitors compliance by its contractors with section 934(c) of the Public Health Service Act (PHS Act) (42 U.S.C. 299c-3(c)), which states in part that

No information, if the establishment or person supplying the information or described in it is identifiable, obtained in the course of activities undertaken or supported under this title, may be used for any purpose other than the purpose for which it was supplied unless such establishment or person has consented...to its use for such other purpose. Such information may not be published or released in other form if the person who supplied the information or who is described in it is identifiable unless such person has consented...to its publication or release in other form.

In addition to this requirement, section 933(b)(1) of the PHS Act (42 U.S.C. 299c-2(b)(1)) requires AHRQ to assure that statistics and analyses developed with Agency support are of high quality, comprehensive, timely, and adequately analyzed. Accordingly --

(1) prior to the release or use of data based upon work performed under this Contract, the Contractor agrees to consult with the Project and Contract Officers regarding the proposed release or use. The Contractor will in good faith consider, discuss, and respond to any comments or suggested modifications that are provided by AHRQ within two months of receiving the proposed release or use.

The purpose of such consultation is to assure that:

- (A) identifiable information is being used exclusively for the purpose(s) for which it was supplied or appropriate consents have been obtained;
- (B) the confidentiality promised to individuals and establishments supplying identifiable information or described in it is not violated; and
- (C) the quality of statistical and analytical work meets the statutory standards cited above.
- (2) The Contractor must satisfy conditions (1)(A) and (1)(B). At the conclusion of any consultation required by paragraph (b)(1) above, if AHRQ and the Contractor cannot agree that a proposed use or release satisfies condition (1)(C) above:
- (A) the research professional at the Contractor responsible for the quality of the Contract work will, in advance of any release or use of such data, certify in a letter to the Contracting Officer what differences of opinion cannot be resolved

- regarding the statutory standards referenced in condition (1)(C) and the basis for Contractor assertions that these standards have been met; and
- (B) the Contractor must print prominently on the release or other product, or on any portion that is released, or state prior to any oral presentation or release of such material, the following disclaimer:

THIS PRESENTATION/ PUBLICATION/OR OTHER PRODUCT IS DERIVED FROM WORK SUPPORTED UNDER A CONTRACT WITH THE AGENCY FOR HEALTHCARE RESEARCH AND QUALITY (AHRQ) (#). HOWEVER, THIS PRESENTATION/ PUBLICATION/OR OTHER PRODUCT HAS NOT BEEN APPROVED BY THE AGENCY.

(c) Required Statement Regarding Protected Information. On all written material or other recorded products, or preceding any presentation or other oral disclosure, release or use of material based on identifiable information obtained in the course of work performed under this contract, the Contractor shall make the following statement:

IDENTIFIABLE INFORMATION ON WHICH THIS REPORT, PRESENTATION, OR OTHER FORM OF DISCLOSURE IS BASED IS PROTECTED BY FEDERAL LAW, SECTION 934(c) OF THE PUBLIC HEALTH SERVICE ACT, 42 U.S.C. 299c-3(c). NO IDENTIFIABLE INFORMATION ABOUT ANY INDIVIDUALS OR ENTITIES SUPPLYING THE INFORMATION OR DESCRIBED IN IT MAY BE KNOWINGLY USED EXCEPT IN ACCORDANCE WITH THEIR PRIOR CONSENT. ANY CONFIDENTIAL IDENTIFIABLE INFORMATION IN THIS REPORT OR PRESENTATION THAT IS KNOWINGLY DISCLOSED IS DISCLOSED SOLELY FOR THE PURPOSE FOR WHICH IT WAS PROVIDED.

- (d) Copyright Data first produced in the performance of the Contract. Subject to the terms of this Section regarding release and use of data, AHRQ, through its Contracting Officer, will grant permission under FAR 52.227-17(c)(1)(i) to the Contractor to establish claim to copyright subsisting in scientific and technical articles based on or containing data first produced in the performance of this contract that are submitted for publication in academic, technical or professional journals, symposia proceedings or similar works. When claim to copyright is made, the Contractor shall affix the applicable copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such data are delivered to the Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. In such circumstances, the Contractor hereby agrees to grant to AHRQ, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license for all such data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of AHRQ. A description of this license will be incorporated into the copyright notices required above.
- (e) Subcontracts. Whenever data, analyses, or other recorded products are to be developed by a subcontractor under this Contract, the Contractor must include the terms of H.1 in the subcontract, without substantive alteration, with a provision that the subcontractor may not further assign to another party any of its obligations to the Contractor. No clause may be

included to diminish the Government's stated requirements or rights regarding release or use of products or materials based on data derived from work performed under this contract.

H.2 LACK OF COMPLIANCE WITH REQUIREMENTS FOR RELEASE OR USE

Failure to submit materials for statutorily mandated confidentiality and statistical and analytic quality reviews as required by Section H.1 of this contract will be viewed as a material violation and breach of the terms of this contract, as the requirements of this provision are necessary for AHRQ to carry out its statutory obligations and responsibilities. Such violations, as well as other violations of the contract terms which are deemed serious, could result in the initiation of debarment proceedings in accordance with the Federal Acquisition Regulations and the Department of Health and Human Services implementing regulations. Records of the Contractor's performance, including the Contractor's performance pertaining to this Contract, will be maintained in AHRQ's Contracts Management Office and will be considered as an element of past performance which is part of all subsequent competitive contract proposal reviews.

H.3 SALARY RATE LIMITATION LEGISLATION PROVISION

Pursuant to P.L. 109-149, no Fiscal Year 2006 (October 1, 2005 – September 30, 2006) funds may be used to pay the direct salary of an individual through this contract at a rate in excess of the direct salary rate for Executive Level I of the Federal Executive Pay Scale. That rate is \$183,500 per year for the period of January 1, 2006 through December 31, 2006. Direct salary is exclusive of overhead, fringe benefits, and general and administrative expenses. The salary limit also applies to individuals proposed under subcontracts. If this is a multi-year contract, it may be subject to unilateral modifications by the Government if any salary rate ceilings are established in future DHHS appropriation acts. P.L. 109-149 states in pertinent part:

None of the funds appropriated in this Act for the National Institutes of Health, the Agency for Healthcare Research and Quality, and the Substance Abuse and Mental Health services Administration shall be used to pay the salary of an individual, through a grant or other extramural mechanism, at a rate in excess of Executive Level I.

Contractors shall absorb that portion of an employee's salary (plus the dollar amount for fringe benefits and indirect costs associated with the excess) that exceeds a rate of \$183,500 a year.

H.4 SUBCONTRACTS

The contractor must include in any subcontracts executed or used to provide the support specified in this contract the terms of requirements H.1, H.2, H.3 and H.4. These requirements are to be included without substantive alteration, and no clause may be included to diminish these requirements.

Award of any subcontract is subject to the written approval of the Contracting Officer upon review of the supporting documentation as required by FAR Clause 52.215-12, Subcontractor Cost or Pricing Data, of the General Clauses incorporated into this contract. A copy of the signed subcontract shall be provided to the Contracting Officer.

H.5 LATE PAYMENTS TO THE GOVERNMENT

Late payment of debts owed the Government by the Contractor, arising from whatever cause, under this contract/order shall bear interest at a rate or rates to be established in accordance with the Treasury Fiscal Requirements Manual. For purposes of this provision, late payments are defined as payments received by the Government more than 30 days after the Contractor has been notified in writing by the Contracting Officer of:

- The basis of indebtedness.
- b. The amount due.
- c. The fact that interest will be applied if payment is not received within 30 days from the date of mailing of the notice.
- d. The approximate interest rate that will be charged.

H.6 PRIVACY ACT

The Privacy Act clauses cited in Section I (FAR 52.224-1 and 52.224-2) are applicable to the consultant records kept by the Contractor for the Agency for Healthcare Research and Quality.

You are hereby notified that the Contractor and its employees are subject to criminal penalties for violations of the Act (5 U.S.C. 552a(i)) to the same extent as employees of the Department. The Contractor shall assure that each Contractor employee is aware that he/she can be subjected to criminal penalties for violations of the Act. Disposition instructions: Records are to be destroyed after contract closeout is completed and final payment is made and in accordance with IRS regulations.

H.7 PRO-CHILDREN ACT of 1994

The Pro-Children Act of 1994, P.L. 103-227, imposes restrictions on smoking where certain federally funded childrens' services are provided. P.L. 103-227 states in pertinent part:

PHS strongly encourages all grant and contract recipients to provide a smoke-free workplace and to promote the non-use of all tobacco products. In addition, P.L. 103-227, the Pro-Children Act of 1994, prohibits smoking in certain facilities (or in some cases, any portion of a facility) in which regular or routine education, library, day care, health care or early childhood development services are provided to children."

H.8 PERSONNEL SECURITY REQUIREMENTS

BACKGROUND

The Office of Assistant Secretary for Management and Budget, Department of Health and Human Services (DHHS), requires that all DHHS employees and contractor employees (including subcontractors) who will be working in a DHHS-owned or leased

space and/or who will have access to DHHS equipment, and non-public privileged, proprietary, or trade secret information, undergo a background investigation.

GENERAL

Notwithstanding other submission requirements stated elsewhere in this contract, the contractor shall appoint and identify a Contractor Security Representative and submit the following information for each employee to the Contracting Officer within thirty (30) calendar days after contract award.

SF-85 Questionnaire for Non-Sensitive Positions

HHS Credit Release

OF-306 Declaration for Federal Employment

Current resume

Note: Forms are available at: http://www.gsa.gov/Portal/formslibrary.jsp

Within thirty (30) days after contract award each employee will be required to have electronic fingerprinting performed — Fingerprinting services are available by appointment only through the Program Support Staff (PSC) and will be arranged by AHRQ.

H.9 PROTECTION AND USE OF DATA

The Contractor should pay special attention to the above clauses in Section H which characterizes the rights to data. The Contractor shall not use for purposes other than the performance of this contract, nor shall the contractor release, reproduce, distribute, or publish any data first produced in the performance of this contract, nor authorize others to do so, without prior written permission of the Project Officer. Under this contract, AHRQ retains unlimited rights in all data delivered under this contract, and in all data first produced in the performance of this contract.

Further, an organization's non-HCUP-related business shall remain completely separate from HCUP activities in data processing and handling and data dissemination. HCUP activities shall not be used as an opportunity to promote the organization and/or the organization's products (e.g., non-HCUP databases, software) and/or services. For example, the Contractor, in the course of answering HCUP data inquiries, shall not direct or suggest to the inquirer, the use of the organization's products or services, or direct them to others in the organization with such knowledge. Nor shall the Contractor use information obtain about the inquirer to promote non-HCUP related activities at a separate time. The Contractor shall make it clear that they are acting on behalf of AHRQ. Contractor staff assigned to HCUP responsibilities should not be engaged in other organizational activities that may represent a conflict of interest to HCUP activities, or harm HCUP and AHRQ in anyway.

PART II - CONTRACT CLAUSES SECTION I - CONTRACT CLAUSES GENERAL CLAUSES FOR A COST-PLUS-A-FIXED-FEE CONTRACT

CLAUSES INCORPORATED BY REFERENCE (FEBRUARY 1998)

This contract incorporates the following clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this address: http://www.arnet.gov/far/

I. FEDERAL ACQUISITION REGULATION (FAR) (48 CFR CHAPTER 1) CLAUSES

FAR Clause No.	Title and Date
52.203-3	Gratuities (APR 1984)
52.203-5	Covenant Against Contingent Fee (APR 1984)
52.203-6	Restrictions on Subcontractor Sales to the Government (Jul 1995)
52.203-7	Anti-Kickback Procedures (JUL 1995)
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity (JAN 1997)
52.203-10	Price or Fee Adjustment for Illegal or Improper Activity (JAN 1997)
52.203-12	Limitation on Payments to Influence Certain Federal Transactions (SEP 2005)
52.204-4	Printing or Copying Double-Sided on Recycled Paper (AUG 2000)
52.204-7	Central Contractor Registration. (OCT 2003)
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment (JAN 2005)
52.215-2	Audit and Records - Negotiation (JUN 1999)
52.215-8	Order of Precedence-Uniform Contract Format (Oct 1997)
52.215-10	Price Reduction for Defective Cost or Pricing Data (OCT 1997) (applicable to contract actions over \$550,000)
52.215-12	Subcontractor Cost or Pricing Data (OCT 1997) (applicable to contract actions over \$550,000)

52.215-15	Pension Adjustments and Asset Reversions (OCT 2004)
52.215-17	Wavier of Facilities Capital Cost of Money (OCT 1997)
52.215-18	Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other Than Pensions (JUL 2005)
52.215-19	Notification of Ownership Changes (OCT 1997)
52.216-7	Allowable Cost and Payment (DEC 2002)
52.216-8	Fixed Fee (MAR 1997)
52.216-27	Single or Multiple Awards (OCT 1995)
52.217-5	Evaluation of Options (JUL 1990)
52.217-8	Option to Extend Services (NOV 1999)
52.219-4	Notice of Price Evaluation Preference for HUBZone Small Business Concerns (OCT 2004)
52.219-8	Utilization of Small Business Concerns (MAY 2004)
52.219-9	Small Business Subcontracting Plan (JAN 2002) (Applicable to contracts over \$500,000)
52.219-16	Liquidated Damages - Subcontracting Plan (JAN 1999)
52.219-25	Small Disadvantaged Business Participation Program - Disadvantaged Status and Reporting (OCT 1999)
52.222-2	Payment for Overtime Premiums (JUL 1990). The amount in paragraph (a) is "zero" unless different amount is separately stated elsewhere in contract.
52.222-3	Convict Labor (JUNE 2003)
52.222-26	Equal Opportunity (APR 2002)
52.222-35	Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans. (DEC 2001)
52.222-36	Affirmative Action for Workers With Disabilities (JUNE 1998)
52.222-37	Employment Reports on Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans. (DEC 2001)
52.222-39	Notification of Employee Rights Concerning Payment of Union Dues or Fees (DEC 2004)

52.223-6	Drug Free Workplace (MAY 2001)
52.223-14	Toxic Chemical Release Reporting (AUG 2003)
52.224-1	Privacy Act Notification (APRIL 1984)
52.224-2	Privacy Act (APRIL 1984)
52.225-1	Buy American Act - Supplies (JUNE 2003)
52.225-13	Restrictions on Certain Foreign Purchases (FEB 2006)
52.227-1	Authorization and Consent (JULY 1995)
52.227-2	Notice and Assistance Regarding Patent and Copy- Right Infringement (AUG 1996)
52.227-3	Patent Indemnity (APRIL 1984)
52.227-17	Rights in Data – Special Works (JUNE 1987)
52.228-7	Insurance-Liability to Third Persons (MAR 1996)
52.230-2	Cost Accounting Standards (APR 1998)
52.230-3	Disclosure and Consistency of Cost Accounting Practices (APR 1998)
52.230-6	Administration of Cost Accounting Standards (APR 2005)
52.232-9	Limitation on Withholding of Payments (APRIL 1984)
52.232-17	Interest (JUNE 1996)
52.232-18	Availability of Funds (APRIL 1984)
52.232-20	Limitation of Cost (APR 1984)
52.232-22	Limitation of Funds (APR 1984) (This clause supersedes the Limitation of Cost clause found in the General Clauses of this contract.)
52.232-23	Assignment of Claims (JAN 1986)
52.232-25	Prompt Payment (OCT 2003)
52.232.33	Payment by Electronic Funds Transfer Central Contractor Registration (OCT 2003)
52.233-1	Disputes (JULY 2002)

52.233-3	Protest After Award (AUG 1996) Alternate I (JUNE 1985)	
52.233-4	Applicable Law for Breach of Contract Claim (OCT 2004)	
52.237-10	Identification of Uncompensated Overtime (Oct 1997)	
52.239-1	Privacy or Security Safeguards (AUG 1996)	
52.242-1	Notice of Intent to Disallow Costs (APRIL 1984)	
52.242-3	Penalties for Unallowable Costs (MAY 2001)	
52.242-4	Certification of Final Indirect Costs (Jan 1997)	
52.242-13	Bankruptcy (JULY 1995)	
52.243-2	Changes - Cost Reimbursement (AUG 1987) - Alternate II (APRIL 1984)	
52.244-2	Subcontracts (AUGUST 1998)	
52.244-5	Competition in Subcontracting (DEC 1996)	
52.245-5	Government Property (Cost Reimbursement, Time-and-Material, or Labor-Hour Contract (MAY 2004)	
52.246-5	Inspection of Services-Cost Reimbursement (APRIL 1984)	
52.246-23	Limitation of Liability-(FEB 1997)	
52.248-1	Value Engineering (FEB 2000)	
52.249-6	Termination (Cost-Reimbursement) (MAY 2004)	
52.249-14	Excusable Delays (APRIL 1984)	
52.251-1	Government Supply Sources (APRIL 1984)	
52.253-1	Computer Generated Forms (JAN 1991)	
II. DEPARTMENT OF HEALTH AND HUMAN SERVICES ACQUISITION REGULATION (HHSAR) (48 CFR CHAPTER 3) CLAUSES		
HHSAR <u>Clause No</u> .	Title and Date	
352.202-1	Definitions (JAN 2001) Alternate h	
352.223-70	Safety and Health (JAN 2001)	

352.224-70	Confidentiality of Information (APRIL 1984)
352.228-7	Insurance - Liability to Third Persons (DEC 1991)
352.232-9	Withholding of Contract Payments (APRIL 1984)
352.233-70	Litigation and Claims (APR 1984)
352.242-71	Final Decisions on Audit Findings (APRIL 1984)
352.270-1	Accessibility of Meetings, Conferences, and Seminars to Persons with Disabilities (JAN 2001)
352.270-6	Publication and Publicity (JUL 1991)
352.270-7	Paperwork Reduction Act (JAN 2001)
352.270-8	Protection of Human Subjects (JAN 2001)

The following clauses are applicable to this contract and are provided in full text:

OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000) FAR 52.217-9

- (a) The Government may extend the term of this contract by written notice to the Contractor within 30 days of the expiration date of the contract; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.
- (b) If the Government exercises this option, the extended contract shall be considered to include this option clause.
- (c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 60 months.

(End of clause)

KEY PERSONNEL (APR 1984) (HHSAR 352.270-5)

The personnel specified in this contract are considered to be essential to the work being performed hereunder. Prior to diverting any of the specified individuals to other programs, the Contractor shall notify the Contracting Officer reasonably in advance and shall submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on the program. No diversion shall be made by the Contractor without the written consent of the Contracting Officer; provided, that the Contracting Officer may ratify in writing such diversion and such ratification shall constitute the consent of the Contracting Officer required by this clause. The contract may be amended from time to time during the course of the contract to either add or delete personnel, as appropriate.

(End of clause)

PART III- LIST OF DOCUMENTS, EXHIBITS AND ATTACHMENTS SECTION J - LIST OF ATTACHMENTS

Attach	<u>nment</u>	Pages
1.	Statement of Work	37
2.	Past Performance Questionnaire and Contractor Performance Form	5
3.	SF LLL-A, Disclosure of Lobbying Activities	3
4.	Proposal Intent Form	1
5.	Small Business Subcontracting Plan	8
6.	Guidelines for Developing Web-Based Products	5
7.	Guidelines for Developing AHRQ Web-Based Tools	5
8.	Breakdown of Proposed Estimated Cost (Plus Fee) and Labor Hours	1

NOTE: ALL ATTACHMENTS ARE LOCATED AT THE END OF THIS REQUEST FOR PROPOSAL.

PART IV. REPRESENTATIONS AND INSTRUCTIONS

SECTION K

REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS

K.1	HHSAR 315.204-5	Representations and Instructions
K.2.	FAR 52.204-8	Annual Representations and Certifications (JAN 2005)
K.3.	FAR 52.222-21	Prohibition of Segregated Facilities (FEB 1999)
K.4.	FAR 52.230-1	Cost Accounting Standards Notices and Certification (JUNE 2000)
K.5.	FAR 15.406-2	Certificate of Current Cost and Pricing Data
K.6.	P.L. 103-227	Certification Regarding Environmental Tobacco Smoke

K.I REPRESENTATIONS AND INSTRUCTIONS

- (a) Section K, Representations, certifications, and other statements of offerors.
- (1) This section shall begin with the following and continue with the applicable representations and certifications:

TO BE COMPLETED BY THE OFFEROR: (The Representations and Certifications must be executed by an individual authorized to bind the Offeror.) The Offeror makes the following Representations and Certifications as part of its proposal. (Check or complete all appropriate boxes or blanks on the following pages.)

(Name of Offeror)	(RFP No.)	
(Signature of Authorized Individual)	(Date)	

(Typed Name of Authorized Individual)

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

K.2. ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JAN 2005) (FAR 52.204-8)

- (a)(1) If the clause at 52.204-7, Central Contractor Registration, is included in this solicitation, paragraph (b) of this provision applies.
- (2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (b) instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:
 - [] (i) Paragraph (b) applies
 - [] (ii) Paragraph (b) does not apply and the offeror has completed the individual representations and certification in the solicitation.
- (b) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at http://orca/bpn.gov. After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below (offeror to insert changes, identifying change by clause number, title, date). These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR Clause# Title Date Change

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.

(End of provision)

K.3. PROHIBITION OF SEGREGATED FACILITIES (FEB 1999) (FAR 52.222-21)

(a) "Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

- (b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.
- (c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

 (End of Clause)

K.4. COST ACCOUNTING STANDARDS NOTICES AND CERTIFICATION

(FAR 52.230-1) (JUNE 2000)

NOTE: This notice does not apply to small businesses or foreign governments. This notice is in three parts, identified by Roman numerals I through III.

Offerors shall examine each part and provide the requested information in order to determine Cost Accounting Standards (CAS) requirements applicable to any resultant contract.

If the offeror is an educational institution, Part II does not apply unless the contemplated contract will be subject to full or modified CAS-coverage pursuant to 48CFR 9903.201-2(c)(5) or 9903.201-2(c)(6),respectively.

- I. Disclosure Statement Cost Accounting Practices and Certification
- (a) Any contract in excess of \$500,000 resulting from this solicitation, will be subject to the requirements of the Cost Accounting Standards Board (48 CFR, Chapter 99), except for those contracts which are exempt as specified in 48 CFR 9903.201-1.
- (b) Any offeror submitting a proposal which, if accepted, will result in a contract subject to the requirements of 48 CFR Chapter 99 must, as a condition of contracting, submit a Disclosure Statement as required by 48 CFR 9903.202. When required, the Disclosure Statement must be submitted as a part of the offeror's proposal under this solicitation unless the offeror has already submitted a Disclosure Statement disclosing the practices used in connection with the pricing of this proposal. If an applicable Disclosure Statement has already been submitted, the offeror may satisfy the requirement for submission by providing the information requested in paragraph (c) of Part I of this provision. Caution: In the absence of specific regulations or agreement, a practice disclosed in a Disclosure Statement shall not, by virtue of such disclosure, be deemed to be a proper, approved, or agreed-to practice for pricing proposals or accumulating and reporting contract performance cost data.
 - (c) Check the appropriate box below:
 - [] (1) Certificate of Concurrent Submission of Disclosure Statement.

 The offeror hereby certifies that, as a part of the offer, copies of the

 Disclosure Statement have been submitted as follows: (i) original and one
 copy to the cognizant Administrative Contracting Officer (ACO) or cognizant

Federal agency official authorized to act in that capacity, as applicable, and (ii) one copy to the cognizant Federal auditor.

(Disclosure must be on Form No. CASB DS-1 or CASB

DS-2, as applicable. Forms may be obtained from the cognizant ACO or Federal official and/or from the loose-leaf version of the Federal Acquisition Regulation.)

Date of Disclosure Statement:	
Name and Address of Cognizant	
ACO or Federal official where filed:	

The offeror further certifies that practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the Disclosure Statement.

[] (2) Certificate of Previously Submitted Disclosure Statement.

The offeror hereby certifies that the required Disclosure Statement was filed as follows:

Date of Disclosure Statement:_	
Name and Address of Cognizant	
ACO or Federal official where filed	l:

The offeror further certifies that the practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the applicable Disclosure Statement.

[] (3) Certificate of Monetary Exemption.

The offeror hereby certifies that the offeror together with all divisions, subsidiaries, and affiliates under common control, did not receive net awards of negotiated prime contracts and subcontracts subject to CAS totaling more than \$25 million in the cost accounting period immediately preceding the period in which this proposal was submitted. The offeror further certifies that if such status changes before an award resulting from this proposal, the offeror will advise the Contracting Officer immediately.

[] (4) Certificate of Interim Exemption.

The offeror hereby certifies that (i) the offeror first exceeded the monetary exemption for disclosure, as defined in (3) of this subsection, in the cost accounting period immediately preceding the period in which this offer was submitted and (ii) in accordance with 48 CFR, Subpart 9903.202-1, the offeror is not yet required to submit a Disclosure Statement. The offeror further certifies that if an award resulting from this proposal has not been made within 90 days after the end of that period, the offeror will immediately submit a review certificate to the Contracting Officer, in the form specified under subparagraph (c)(1) or (c)(2) of Part I of this provision, as appropriate, to verify submission of a completed Disclosure Statement.

Caution: Offerors currently required to disclose because they were awarded a CAS-covered prime contract or subcontract of \$25 million or more in the current cost accounting period may not claim this exemption (4). Further, the exemption applies only in connection with proposals submitted before expiration of the 90-day period following the cost accounting period in which the monetary exemption was exceeded.

II. Cost Accounting Standards - Eligibility for Modified Contract Coverage

If the offeror is eligible to use the modified provisions of 48 CFR, Subpart 9903.201-2(b) and elects to do so, the offeror shall indicate by checking the box below. Checking the box below shall mean that the resultant contract is subject to the Disclosure and Consistency of Cost Accounting Practices clause in lieu of the Cost Accounting Standards clause.

[] The offeror hereby claims an exemption from the Cost Accounting Standards clause under the provisions of 48 CFR, Subpart 9903.201-2(b) and certifies that the offeror is eligible for use of the Disclosure and Consistency of Cost Accounting Practices clause because during the cost accounting period immediately preceding the period in which this proposal was submitted, the offeror received less than \$25 million in awards of CAS-covered prime contracts and subcontracts or the offeror did not receive a single CAS-covered award exceeding \$1 million. The offeror further certifies that if such status changes before an award resulting from this proposal, the offeror will advise the Contracting Officer immediately.

Caution: An offeror may not claim the above eligibility for modified contract coverage if this proposal is expected to result in the award of a CAS-covered contract of \$25 million or more or if, during its current cost accounting period, the offeror has been awarded a single CAS-covered prime contract or subcontract of \$25 million or more.

III. Additional Cost Accounting Standards Applicable to Existing Contracts

The offeror shall indicate below whether award of the contemplated contract would, in accordance with subparagraph (a)(3) of the Cost Accounting Standards clause, require a change in established cost accounting practices affecting existing contracts and subcontracts.

[] Yes	[] No	
		(End of Provision)

ALTERNATE I (APR 1996)

[] (5) Certificate of Disclosure Statement Due Date by Educational Institution.

If the offeror is an educational institution that, under the transition provisions of 48 CFR 9903.202-1(f), is or will be required to submit a Disclosure Statement after receipt of this award, the offeror hereby certifies that (check one and complete):

[] (a) A Disclosure Statement filing Due Date of has been established with the cognizant Federal agency.
[] (b) The Disclosure Statement will be submitted within the six month period ending months after receipt of this award.
Name and Address of cognizant ACO or Federal Official where Disclosure Statement is to be filed:
(END OF ALTERNATE I)
K.5. CERTIFICATE OF CURRENT COST OR PRICING DATA (FAR 15.406-2)
CERTIFICATE OF CURRENT COST OR PRICING DATA
When cost or pricing data are required, the contracting officer shall require the contractor to execute a Certificate of Current Cost or Pricing Data using the format in this paragraph, and shall include the executed certificate in the contract file.
This is to certify that, to the best of my knowledge and belief, the cost or pricing data (as defined in Section 15.401 of the Federal Acquisition Regulation(FAR) and required under FAR subsection 15.403-4) submitted, either actually or by specific identification, in writing, to the contracting officer or the contracting officer's representative in support of* are accurate, complete, and current as of**. This certification includes the cost or pricing data supporting any advance agreements and forward pricing rate agreements between the offeror and the Government that are part of the proposal.
FIRM
NAME Signature
TITLE
DATE OF EXECUTION***

End of Certificate

^{*} Identify the proposal, request for price adjustment, or other submission involved, giving the appropriate identifying number (e.g., Request for Proposal number).

^{**} Insert the day, month, and year when price negotiations were concluded and price agreement was reached or, if applicable, an earlier date agreed upon between the parties that is close as practicable to the date of agreement on price.

^{***} Insert the day, month, and year of signing, which should be as close as practicable to the date when the price negotiations were concluded and the contract price agreed to.

K.6. ENVIRONMENTAL TOBACCO SMOKE

The Public Health Service strongly encourages all grant and contract recipients to provide a smoke-free workplace and to promote the nonuse of all tobacco products. In addition, Public Law 103-227, the Pro-Children Act of 1994, prohibits smoking in certain facilities (or in some cases, any portion of a facility) in which regular or routine education, library, day care, health care or early childhood development services are provided to children.

CERTIFICATION REGARDING ENVIRONMENTAL TOBACCO SMOKE

Public Law 103-227, also known as the Pro-Children Act of 1994 (Act), requires that smoking not be permitted in any portion of any indoor facility owned or leased or contracted for by an entity and used routinely or regularly for the provision of health, day care, early childhood development services, education or library services to children under the age of 18, if the services are funded by Federal programs either directly or through State or local governments, by Federal grant, contract, loan, or loan guarantee. The law also applies to children's services that are provided in indoor facilities that are constructed, operated, or maintained with such federal funds. The law does not apply to children's services provided in private residences; portions of facilities used for inpatient drug or alcohol treatment; service providers whose sole source of applicable Federal funds is Medicare or Medicaid; or facilities where WIC coupons are redeemed. Failure to comply with the provisions of the law may result in the imposition of a civil monetary penalty of up to \$1000 for each violation and/or the imposition of an administrative compliance order on the responsible entity.

By signing this certification, the offeror/contractor certifies that the submitted organization will comply with the requirements of the Act and will not allow smoking within any portion of any indoor facility used for the provision of services for children as defined by the Act.

The submitting organization agrees that it will require that the language of this certification be included in any subawards which contain provisions for children's services and that all subrecipients shall certify accordingly.

Organization:		
Signature	Title	
Oignaturo		
Date		

SECTION L - INSTRUCTIONS, CONDITIONS AND NOTICES TO OFFERORS

L.1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998) (FAR 52.252-1)

This solicitation incorporates the following solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the contracting officer will make the full text available. Also, the full text of a clause may be assessed electronically at this address: http://www.arnet.gov/far/

- a. Federal Acquisition Regulation (FAR) (48 CFR Chapter 1) Solicitation Provisions
 - (1) 52.215-16 Facilities Capital Cost of Money (OCT 1997)
 - (2) 52.215-20 Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data (OCT 1997)

L.2 DATA UNIVERSAL NUMBERING (DUNS) (OCT 2003) (FAR 52.204-6)

- (a) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS+4" followed by the DUNS number or "DUNS+4" that identifies the offeror's name and address exactly as stated in the offer. The DUNS number is a nine-digit number assigned by Dun and Bradstreet Information Services. The DUNS+4 is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the offeror to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11) for the same parent concern.
- (b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.
 - (1) An offeror may obtain a DUNSnumber—
 - (i) If located within the United States, by calling Dun and Bradstreet at 1-866-705-5711 or via the iInternet at http://www.dnb.com; or
 - (ii) If located outside the United States, by contacting the local Dun and Bradstreet office.
 - (2) The offeror should be prepared to provide the following information:
 - (i) Company legal business name.
 - (ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.
 - (iii) Company physical street address, city, state and Zip Code.
 - (iv) Company mailing address, sity, state and Zip Code (if separate from physical).
 - (v) Company telephone number.
 - (vi) Date the company was started.

- (vii) Number of employees at your location.
- (viii) Chief executive officer/ key manager.
- (ix) Line of business (industry)
- (X) Company Headquarters name and address (reporting relationship within your entity).

(End of provision)

L.3 INSTRUCTIONS TO OFFERORS - COMPETITIVE ACQUISITION (MAY 2001) ALTERNATE I (JAN 2004)(FAR 52.215-1)

(a) Definitions. As used in this provision –

"Discussions" are negotiations that occur after establishment of the competitive range that may, at the Contracting Officer's discretion, result in the offeror being allowed to revise its proposal.

"In writing," "writing," or "written" means any worded or numbered expression that can be read, reproduced, and later communicated, and includes electronically transmitted and stored information.

"Proposal modification" is a change made to a proposal before the solicitation's closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

"Proposal revision" is a change to a proposal made after the solicitation closing date, at the request of or as allowed by a Contracting Officer as the result of negotiations.

"Time," if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays. However, if the last day falls on a Saturday, Sunday or legal holiday, then the period shall include the next working day.

- (b) Amendments to solicitations. If this solicitation is amended, all terms and conditions that are not amended remain unchanged. Offerors shall acknowledge receipt of any amendment to this solicitation by the date and time specified in the amendment(s).
- (c) Submission, modification, revision, and withdrawal of proposals.
 - (1) Unless other methods (e.g., electronic commerce or facsimile) are permitted in the solicitation, proposals and modifications to proposals shall be submitted in paper media in sealed envelopes or packages (i) addressed to the office specified in the solicitation, and (ii) showing the time and date specified for receipt, the solicitation number, and the name and address of the offeror. Offerors using commercial carriers should ensure that the proposal is marked on the outermost wrapper with the information in paragraphs (c)(1)(i) and (c)(1)(ii) of this provision.

- (2) The first page of the proposal must show—
 - (i) The solicitation number;
 - (ii) The name, address, and telephone and facsimile numbers of the offeror (and electronic address if available);
 - (iii) A statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and agreement to furnish any or all items upon which prices are offered at the price set opposite each item;
 - (iv) Names, titles, and telephone and facsimile numbers (and electronic addresses if available) of persons authorized to negotiate on the offeror's behalf with the Government in connection with this solicitation; and
 - (v) Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.
- (3) Submissions, modification, revision, and withdrawal of proposals.
 - (i) Offerors are responsible for submitting proposals, and any modification or revisions, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that proposal or revision is due.
 - (ii) (A) Any proposal, modification, or revision received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and -
 - (1) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or
 - (2) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the

Government's control prior to the time set for receipt of offers; or

- (3) It is the only proposal received.
- (B) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.
- (iii) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.
- (iv) If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at the office designated for receipt of proposals by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.
- (v) Proposals may be withdrawn by written notice received at any time before award. Oral proposals in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision at 52.215-5, "Facsimile Proposals." Proposals may be withdrawn in person by an offeror or an authorized representative, if the representative's identity is made known and the representative signs a receipt for the proposal before award.
 - (4) Unless otherwise specified in the solicitation, the offeror may propose to provide any item or combination of items.
 - (5) Offerors shall submit proposals submitted in response to this solicitation in English, unless otherwise permitted by the solicitation, and in U.S. dollars, unless the provision at FAR 52.225-17, Evaluation of Foreign Currency Offers, is included in the solicitation.

- (6) Offerors may submit modifications to their proposals at any time before the solicitation closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.
- (7) Offers may submit revised proposals only if requested or allowed by the Contracting Officer.
- (8) Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.
- (d) Offer expiration date. Proposals in response to this solicitation will be valid for the number of days specified on the solicitation cover sheet (unless a different period is proposed by the offeror).
- (e) Restriction on disclosure and use of data. Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall —
 - (1) Mark the title page with the following legend:

This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed—in whole or in part—for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of—or in connection with— the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [insert numbers or other identification of sheets]; and

(2) Mark each sheet of data it wishes to restrict with the following legend:

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

- (f) Contract award.
 - (1) The Government intends to award a contract or contracts resulting from this solicitation to the responsible offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors and subfactors in the solicitation.
 - (2) The Government may reject any or all proposals if such action is in the Government's interest.

- (3) The Government may waive informalities and minor irregularities in proposals received.
- (4) The Government intends to evaluate proposals and award a contract after conducting discussions with offerors whose proposals have been determined to be within the competitive range. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals. Therefore, the offeror's initial proposal should contain the offeror's best terms from a price and technical standpoint.
- (5) The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies otherwise in the proposal.
- (6) The Government reserves the right to make multiple awards if, after considering the additional administrative costs, it is in the Government's best interest to do so.
- (7) Exchanges with offerors after receipt of a proposal do not constitute a rejection or counteroffer by the Government.
- (8) The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items or subline items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.
- (9) If a cost realism analysis is performed, cost realism may be considered by the source selection authority in evaluating performance or schedule risk.
- (10) A written award or acceptance of proposal mailed or otherwise furnished to the successful offeror within the time specified in the proposal shall result in a binding contract without further action by either party.
- (11) If a post-award debriefing is given to requesting offerors, the Government shall disclose the following information, if applicable:
 - (i) The agency's evaluation of the significant weak or deficient factors in the debriefed offeror's offer.

- (ii) The overall evaluated cost or price and technical rating of the successful and the debriefed offeror and past performance information on the debriefed offeror.
- (iii) The overall raking of all offerors, when any ranking was developed by the agency during source selection
- (iv) A summary of the rationale for award
- (v) For acquisitions of commercial items, the make and model of the item to be delivered by the successful offeror.
- (vi) Reasonable responses to relevant questions posed by the debriefed offerors as to whether source-slection procedures set forth in the solicitation, applicable regulations, and other applicable authorities were followed by the agency.

(End of provision)

L.4 TYPE OF CONTRACT (APRIL 1984)(FAR 52.216-1)

The Government contemplates award of a cost reimbursement, completion type contract resulting from this solicitation.

It is anticipated that one contract award will be made from this solicitation and that the award is estimated to be made in September 2006.

L.5 SERVICE OF PROTEST (AUG 1996)(FAR 52.233-2)

(a) Protests, as defined in Section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO) shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

Director, Division of Contracts Management Agency for Healthcare Research and Quality 540 Gaither Road Rockville, Maryland 20850

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

L.6 POINT OF CONTACT FOR TECHNICAL INQUIRIES

The technical contact for additional information and answering inquiries is the Contracting Officer. All questions regarding this solicitation shall be in writing and received by the Contracting Officer no later than **June 1**, **2006**. It is preferred that all

questions be e-mailed to Sharon Williams at sharon.williams@ahrq.hhs.gov. Hard copies can be sent to:

Agency for Healthcare Research and Quality OPART/Contracts Management 540 Gaither Road Rockville, MD 20850 Attention: Sharon Williams, Contracting Officer

Fax: (301) 427-1740

L.7 REFERENCE MATERIALS

Offerors are directed to http://www.ahrq.gov/fund/contarchive/rfp060009.htm for references pertaining to this solicitation. Failure of offerors to examine the reference material prior to proposal preparation and submission will be at the offeror's risk.

L.8 GENERAL INSTRUCTIONS

Introduction

The following instructions will establish the acceptable minimum requirements for the format and contents of proposals. Special attention is directed to the requirements for technical and business proposals to be submitted in accordance with these instructions:

- a. <u>Contract Type and General Provisions</u>: It is contemplated that a cost-reimbursement, completion type contract will be awarded. In addition to the special provisions of this request for proposal (RFP), any resultant contract shall include the general clauses applicable to the selected offeror's organization and type of contract awarded. Any additional clauses required by Public Law, Executive Order, or procurement regulations, in effect at the time of execution of the proposed contract, will be included.
- b. <u>Authorized Official and Submission of Proposal</u>: The proposal shall be signed by an official authorized to bind your (the offeror's) organization. Your proposal shall be submitted in the number of copies, to the address, and marked as indicated in the cover letter of this solicitation. Proposals will be typewritten, reproduced on letter sized paper and will be legible in all required copies. To expedite the proposal evaluation, all documents required for responding to the RFP should be placed in the following order:
 - I. <u>TECHNICAL PROPOSAL</u>: See Technical Proposal Instructions for recommended format (L.9). Please mark as original or copy.
 - II. <u>PAST PERFORMANCE INFORMATION</u>: See Past Performance Information Instructions for format (L.10)

- III. SMALL DISADVANTAGED BUSINESS PARTICIPATION PLAN: See Small Disadvantaged Business Plan Instructions for format (L.11)
- IV. <u>BUSINESS PROPOSAL</u>: See Business Proposal Instructions for recommended format (L.12).
- Separation of Technical, Past Performance Information, Small
 Disadvantaged Business Participation Plan and Business Proposal: The proposal shall be in 4 parts:
 - (1) Technical Proposal; (2) Past Performance Information; (3) Small Disadvantaged Business Participation Plan and (4) Business Proposal (including the Small Business Subcontracting Plan). Each of the parts shall be separate and complete in itself so that evaluation of one may be accomplished independently of, and concurrently with, evaluation of the other. The technical proposal shall not contain reference to cost; however resources information, such as data concerning labor hours and categories, materials, subcontracts, etc., shall be contained in the technical proposal so that your understanding of the Statement of Work (SOW) may be evaluated. It must disclose your technical approach in as much detail as possible, including, but not limited to, the requirements of the technical proposal instructions.
- d. <u>Evaluation of Proposals</u>: The Government will evaluate technical proposals in accordance with the criteria set forth in Section M, Evaluation/Award Criteria.
- e. <u>Rejection of Proposals</u>: The Government reserves the right to reject any or all proposals received. It is understood that your proposal will become part of the official contract file.
- f. <u>Unnecessarily Elaborate Proposals</u>: Unnecessarily elaborate brochures or other presentations beyond those sufficient to present a complete and effective proposal are not desired and may be construed as an indication of the offeror's lack of cost consciousness. Elaborate art work, expensive visual and other presentation aids are neither necessary nor wanted.
- g. <u>Privacy Act</u>: The Privacy Act of 1974 (Public Law (P.L.) 93-579) requires that a Federal agency advise each individual whom it asks to supply information: 1) the authority which authorized the solicitation; 2) whether disclosure is voluntary or mandatory; (3) the principal purpose or purposes for which the information is intended to be used; (4) the uses outside the agency which may be made of the information; and 4) the effects on the individual, if any, of not providing all or any part of the requested information.

Therefore:

(1) The Government is requesting the information called for in this RFP pursuant to the authority provided by Section 301(g) of the

Public Health Service Act, as amended, and P.L. 92-218, as amended.

- (2) Provisions of the information requested are entirely voluntary.
- (3) The collection of this information is for the purpose of conducting an accurate, fair, and adequate review prior to a discussion as to whether to award a contract.
- (4) Failure to provide any or all of the requested information may result in a less than adequate review.
- (5) The information provided by you may be routinely disclosed for the following purposes:
 - -to the cognizant audit agency and the General Accounting Officer for auditing;
 - -to the Department of Justice as required for litigation;
 - -to respond to Congressional inquiries; and
 - -to qualified experts, not within the definition of Department employees for opinions as a part of the review process.

In addition, the Privacy Act of 1974 (P.L. 93-579, Section 7) requires that the following information be provided when individuals are requested to disclose their social security number.

Provision of the social security number is voluntary. Social security numbers are requested for the purpose of accurate and efficient identification, referral, review and management of AHRQ contracting programs. Authority for requesting this information is provided by Section 305 and Title IV of the Public Health Service Act, as amended.

h. The RFP does not commit the Government to pay any cost for the preparation and submission of a proposal. It is also brought to your attention that the Contracting Officer is the only individual who can legally commit the Government to the expenditure of public funds in connection with this or any acquisition action.

The Government reserves the right to award a contract without discussions if the Contracting Officer determines that the initial prices are fair and reasonable and that discussions are not necessary.

L.9 TECHNICAL PROPOSAL INSTRUCTIONS

The technical proposal shall contain an original and eleven (11) copies. The technical proposal described below shall be limited to **250 pages** not including resumes or bibliographies, with no less than a 11 point pitch, with the majority of the text double-spaced (lists of deliverables, person loading charts, and similar materials need not be double-spaced, so long as they are legible). Resumes or CVs are only required for key personnel. Brief biographic sketches of other

personnel may be provided. Lengthy proposals and voluminous appendices are neither needed nor desired as they are difficult to read and evaluate and may indicate the offeror's inability to concisely state their proposal.

a. Recommended Technical Proposal Format

The offeror's proposal should present sufficient information to reflect a thorough understanding of the work requirements and a detailed plan for achieving the objectives of the scope of work. Technical proposals shall not merely paraphrase the requirements of the Agency's scope of work or parts thereof, or use of phrases such as "will comply" or "standard techniques will be employed." The technical proposal must include a detailed description of the techniques and procedures to be used in achieving the proposed end results in compliance with the requirements of the Agency's scope of work.

- (1) <u>Cover Page</u>: The name of the proposing organization, author(s) of the technical proposal, the RFP number and the title of the RFP should appear on the cover. One (1) manually signed original copy of the proposal and the number of copies specified in the RFP cover letter are required.
- (2) <u>Table of Contents</u>: Provide sufficient detail so that all important elements of the proposal can be located readily.
- (3) <u>Introduction</u>: This should be a one or two page summary outlining the proposed work, your interest in submitting a proposal, and the importance of this effort in relation to your overall operation.
- (4) <u>Technical Discussion</u>: The offeror shall prepare a technical discussion which addresses evaluation criteria A, B, C, D, E, and F below. Sections G and H are to be prepared in accordance with Sections L.10 and L.11. The offeror shall further state that no deviations or exceptions to the SOW are taken. The evaluation criteria are as follows:
- A. Understanding the Purpose and Objectives
- B. Technical Approach
 - 1. Technical Discussion
 - 2. Transition Plan
 - 3. Quality Assurance Plan
- C. Qualifications of Proposed Staff, Including Consultants
- D. Organizational/Corporate Experience
- E. Management Plan
- F Facilities and Equipment
- G. Past Performance (See Section L.10)
- H. Small Disadvantaged Business Participation Plan (See Section L.11)

Methodologies followed by the previous contractor are provided in this RFP with varying levels of detail to provide insight into the complexity of the HCUP project. Because HCUP is a continuing project in which future activities will need to be compatible with

previous approaches, a fair amount of detail is provided to illustrate the approaches and steps undertaken. Particularly in the first year of the contract, when the new Contractor will need to process and deliver data in a short time frame and pick up several on-going operations, it is expected that the new Contractor will, for the most part, handle these activities by adopting the previous Contractor's approach where appropriate.

However, unless specifically stated, the methodologies described are primarily provided as examples. Offerors are strongly encouraged to propose alternative, technologically and cost-efficient methods for achieving HCUP goals when appropriate. Ideally, proposed approaches will maintain compatibility with previous HCUP data years while identifying methodologies that take maximum advantage of state-of-the-art data processing techniques that will carry the project forward over the next five years. Offerors should also identify any technical or contractual problem areas and may recommend any alternative recommendations to enhance the project's success.

Offerors should not contact HCUP State Partners directly for the purposes of responding to this RFP.

Technical proposals submitted in response to this RFP shall address each of the items described below, and shall be organized in the same manner and within the page limitations specified. Proposals shall be prepared in double-spaced format, with numbered pages.

The evaluation criteria (and their respective subcriteria) are as follows:

A. Understanding the Purpose and Objectives

Briefly, but in sufficient detail to demonstrate a thorough understanding of the objectives, the offeror shall provide a description of the scope, purpose, products, and events called for under this contract.

B. Technical Approach

The offeror shall describe in detail the methodologies they will use to develop, design, implement, staff, and manage the statement of work for this project. Within the content of the narrative, the offeror shall address technical issues related to completing the tasks, indicating areas of anticipated difficulties and proposed solutions.

1. Technical Discussion

The offeror should describe the approach with respect to the requirements of this acquisition, including:

Database file construction and management, and Information Technology (IT) solutions including procedures, technical solutions and software / hardware architectures for: (1) processing, (2) documentation, (3) maintaining the integrity and security of the data files, (4) assuring high quality software programming, testing and quality assurance; and (5) operations, backup / recovery and security of all IT needed to support HCUP processing;

Constructing research files from multiple data sources that result in files that are uniformly structured while retaining the greatest detail feasible in a cost effective manner.

Sample design, including methods to ensure that the databases can produce generalizable research results and accurate national estimates;

Method for recruiting and collecting data from multiple sources;

Protecting data security and confidentiality;

Producing and disseminating the documentation of data files for AHRQ and outside users;

Manage the HCUP partnership's data acquisition including recruiting new States into the project; requesting additional data types from existing HCUP State Partners; obtaining annual data files; and retaining Partner participation in the project;

Operate the HCUP Central Distributor, which handles all activities directly related to the sales and dissemination of the restricted access public release HCUP databases (the NIS, KID and a sub-set of the full State files used by AHRQ) and related HCUP files:

Provide HCUP Partners with technical assistance on their collection and use of their statewide encounter data to improve the collection and use of inpatient and outpatient data;

Provide AHRQ staff with technical support including access and use of data and documentation system, general technological innovations affecting HCUP data processing, and advances in health care information technology (HIT) relevant to HCUP;

Deliver user support by maintaining an infrastructure to provide technical support to outside users on HCUP databases, software tools, linkable files, written reports and all other products developed for the HCUP project;

Maintain and further develop the HCUP Web site (HCUP-US) which serves as the project's primary vehicle for public outreach, and a virtual repository for project information and documentation;

Write and or edit analytic, descriptive and/or technical health services research reports.

Develop and/or update presentations and courseware for educating stakeholders.

Deliver presentations and training to assorted audiences (technical, non-technical)

Support the generation of estimates derived from HCUP data for the Congressionally- mandated reports: National Healthcare Quality Reports (NHQR) and National Healthcare Disparities Reports (NHDR);

Bidders should also:

Provide a timeline for the major tasks for the 5 years of the project period;

Propose the timing for all project tasks that are not specified in the Delivery Schedule and are marked to be determined "tbd";

Assess the reasonableness of project task timelines and provide a discussion in support of their ability to meet the deadlines or propose alternative timelines; and

May propose innovative approaches to all aspects of the HCUP project that maintain quality and decrease costs and/or time.

Propose option tasks (technical and business) as discrete activities to facilitate assessment.

2. Transition Plan

The plan for organizing the close-out of and transition from the preceding contractor to a new contractor. Including, where applicable, transferring complete responsibility for all files, documentation, and software within 60 days of the effective date of the contract and assuring that all of the ongoing activities listed above are fully staffed and operational within 60 days of the effective date of the contract; and

The plan for transitioning between the current HCUP contract and this award as smoothly as possible in the interest of maintaining on-going operations and minimizing disruption to the creation, production, and dissemination of HCUP data, tools, and technical support. (If submitting a proposal, the HCUP incumbent should describe instead the process for successful close-out of the preceding contract including any necessary disposition of files, documentation and software, and any implications for the new contract start-up.)

3. Quality Assurance Plan

The offeror shall provide a quality assurance plan that details how they shall monitor and control the services provided: technical quality, responsiveness, cost control, and effective and efficient resources utilization as well as compliance with the technical requirements and contract provisions. It should clearly show a proposed system for quality of work performed including data and documents to be produced, and a proposed system for management control.

C. Qualifications of Proposed Staff, Including Subcontractors and Consultants

The offeror shall provide (1) the resumes of all key personnel, senior staff, and technical task leaders describing their qualifications as they relate to the requirements of this solicitation and (2) a person loading chart by task. The offeror is expected to be specific in describing the proposed personnel and their relevant qualifications and experience,

including their background and experience as they relate to the requirements of this acquisition. Highly qualified staff is considered critical to the successful completion of the tasks under this project. It is anticipated that a staff equivalent of approximately 25 – 30 FTEs should be devoted annually to this contract.

The offeror should also describe:

1) Project Director

The experience of the Project Director as it relates to the requirements of this acquisition as evidenced by educational attainment, employment history, experience and specific professional, scientific or technical accomplishments, including the minimum experience requirements below. The Project Director should be a highly qualified senior staff member who is available on a day-to-day basis to direct and monitor the project contract and the associated technical tasks.

At least 10 years of experience in each of the following:

Directing the development and maintenance of a large administrative encounterlevel data in direct support of health services research;

Data processing management, including responsibility for the recruitment and supervision of programming staff, directing multiple simultaneous data processing tasks, and overseeing technical components in a timely and efficient manner;

Production of public use data files, documentation, and user support from large administrative encounter-level data, for independent use by persons not affiliated with the originating organization;

Use of computers in health services research, including use of SAS, STATA, SUDAAN, and other techniques for analyzing data; and

Use of health care data in research and analysis, collaboration with health services researchers on statistical analyses and research appearing in government reports, in scholarly books or journals, or similar publications.

The Project Director must also have experience exhibiting:

Excellent overall project management skills that include substantive/technical areas, teamwork, budget management, cost control, flexibility, and the ability to produce deliverables on-time, within budget, and of exceptionally high technical quality;

Excellent verbal and written communication skills.

The offeror may propose a Project Manager to assist the Project Director with day-to-day management and operations. This individual must be highly qualified, with significant leadership and communication skills, and demonstrated experience and competence in managing complex projects with similar or differing requirements. The Project Manager,

if used, should have at least 5 years training and experience in data and/or health services research and in technical and financial management of complex projects.

2) Staff, Subcontractors, and Consultants

The experience of staff and consultants as it relates to the requirements of this acquisition as evidenced by educational attainment, employment history, experience and specific professional, scientific or technical accomplishments.

Proposed staff, including subcontractors and consultants, shall reflect diverse experience and skills. Overall, the staff mix should reflect a breadth and depth of expertise reflecting the varied tasks and activities to be undertaken. It is expected that the proposed staff will collectively possess the expertise and skills required and that no individual will be skilled in all areas. Areas of experience should include, but are not limited to: data processing (inpatient and outpatient data), computing and programming, documentation, medical coding (ICD-9, ICD-10, CPT, HCPCS), clinical expertise, securing and protecting health data, expertise in health data standards and data technology, health services research (methodological and technical), communication (oral and written), statistics, training presentations, dissemination and outreach, Web site development and maintenance, and providing technical support (interfacing with public), experience in projects that require the participation of external partners, and research expertise.

Offerors are not necessarily expected to have highly specialized personnel in all potential topic areas (e.g., electronic health records, health data standards, marketing and outreach, graphics design). However, offerors must demonstrate that they have access to a range of specialized expertise within their own institution or affiliated organizations, through consulting and subcontracting arrangements, or significant experience in identifying and working collaboratively with such personnel to successfully conduct and complete timely work. An example would be collaboration with an organization with personnel who are specialized in promoting dissemination and outreach to create impact.

Minimum requirements with respect to specific types of programming skill/experience are given below. All programming staff is expected to demonstrate acute attention to detail and the ability to monitor and control multiple databases and tasks simultaneously. Approximately one-half of the proposed programming staff should have each of the following:

5 years or more of experience regularly programming in such applications as SAS, SPSS, STATA, including the ability to create load programs;

2 years or more of formal education in a health-related field or social science;

3 years or more of experience in collaborating in the development of electronic and hard-copy documentation and preparation of data files from large administrative encounter-level data for independent use by persons not affiliated with the originating organization;

3 years or more of experience in linking large administrative encounter-level data to other large multi-user databases including but not limited to data from the

Medicare Cost Report, American Hospital Association Annual Survey, Area Resource File, and Zip Code level files;

3 years or more of experience in experience in using other large claims or discharge databases such as, but not limited to, data from the Healthcare Cost and Utilization Project, Current Population Survey, American Hospital Association files, and Survey on Income and Program Participation;

3 years experience in ICD, CPT, HCPCS coding and clinical software (DRGs, disease staging, etc.);

At least two programmers with 3 or more years experience in HTML programming and other web site support activities.

Minimum requirements with respect to Researchers/Analysts are given below:

At least 1 staff holding an advanced technical or professional degree, at the Ph.D., or Masters level, with a minimum of 10 years of demonstrated knowledge and experience in health policy, health services research, and uses of administrative data, and experience in collaboration with health services researchers on statistical analyses and behavioral research appearing in government reports, in scholarly books or journals, or similar publication;

At least 3 staff holding an advanced technical or professional degree, at the Ph.D., or Masters level, with a minimum of 3 years of demonstrated knowledge and experience in health policy, health services research, and uses of administrative data and experience in collaboration with health services researchers on statistical analyses and behavioral research appearing in government reports, in scholarly books or journals, or similar publications

Staff who will provide technical assistance and educational presentations should have demonstrated knowledge and experience in health services research and uses of administrative data sufficient for interacting with technically sophisticated data users.

Access to at least one staff with medical degree, with both clinical and health services experience.

Minimum requirements with respect to Central Distributor staff are given below.

Task leader should have a minimum of 2 years of experience managing the dissemination of sensitive databases and files.

Task team should have

- demonstrated experience providing high level customer service and frequent interaction with public in person, by phone, and through e-mail
- demonstrated experience of existing data security and privacy issues and fundamental understand of techniques to protect the data

- demonstrated sensitivity of protecting personal information included in applications and data use agreements; and
- demonstrated statistical program skills (especially SAS, SPSS, and STATA), experience Microsoft ACCESS, and general knowledge of administrative data base.

In addition, the contractor must provide:

At least 3 of the staff should be highly organized and detail oriented with excellent communication skills with 3 or more years of experience in recruiting data partners, coordinating with outside agencies, preparing agreements for the uses and restrictions of their data, overseeing the process of data purchase and collection, and providing technical assistance to data organizations.

A senior statistician with at least 5 years experience, including dealing with complex sampling designs and weighting strategies.

At least one statistical programmer with 5 or more years of experience in the sample selection, creation of sampling weights and sampling frames for health databases;

At least 2 of the staff should have experience using database management tools such as Microsoft Access and other software for presentations:

Staff in each major task (where appropriate) with the ability to write in a clear and concise (user-friendly) way with the capacity to explain technical concepts to a broad audience in accurate, readable, and informative documentation.; and

At least 2 of the staff should have expertise with data confidentiality and security issues

At least 2 of the staff should be knowledgeable on technological innovations that may affect many different aspects of the project

D. Organizational/Corporate Experience

The offeror must have demonstrated experience as an organization in successfully conducting and managing large scale and complex projects of a similar nature and scale as those envisioned under this RFP, within the required time and budgetary constraints. It is essential that the offeror demonstrate the capability to organize and manage resources and personnel effectively, and to successfully undertake and complete technical and non-technical tasks at the highest level of professional and scientific quality. The offeror must also have demonstrated experience and success in maintaining sensitive health data security and confidentiality in both their organizational systems, procedures, and personnel. The Offeror's descriptions shall delineate how these organizational experiences and processes are relevant to fulfilling the requirements of this proposed contract.

Specifically, the offeror must have demonstrated experience in the following: managing subcontractors and consultants; building, managing, and analyzing a large

administrative encounter-level database in direct support of health services research; developing systems for monitoring and maintaining secure and efficient computing environment (including programmer resources); processing inpatient and outpatient data, outpatient billing and CPT/HCPCS coding and inpatient billing, and ICD-9 and ICD-10 coding; providing assistance on understanding and adoption of technological innovations that may affect different aspects of the project for the transmission and sharing of data such as the Electronic Health Record; applying national health care data standards; conducting complex programming in support of sample design and other statistical software; developing sample design and sampling weights to produce national or other such estimates; producing electronic documentation from large administrative encounter-level data for independent use by other organizations; recruiting data Partners, coordinating and negotiating with outside agencies for data purchase and collection, and providing technical support and assistance to data organizations and data users; conducting special analyses, providing technical support and training in data collection and analysis; managing large health care electronic databases and Web sites; health policy, uses of administrative data; ability to write user-friendly, technically accurate reports.

Offerors should list and summarize any contracts (state or federal) or grants (state, federal, or private foundation) recently completed (within the last 3 years), or that are currently in process, and describe the relevance to the tasks, sub-tasks, and associated activities that may be performed under this contract. Starting with the most current projects and working backward, this summary should contain: (a) a brief description of each project highlighting specific relevance to the RFP; (b) total level of effort required or annual dollar amount of the procurement; (c) length of project (include date began and completion date) (d) supporting organization (provide name, title, address and telephone number of program contact person or individual in authority who has direct knowledge of the offeror's performance; (e) project director and key staff involved; (f) role of offeror including whether functioned as prime or sub-contractor: (g) lists of examples of relevant products or other deliverables generated.

Please note:

The Contractor should pay special attention to Section H which characterizes the rights to data. The Contractor shall not use for purposes other than the performance of this contract, nor shall the contractor release, reproduce, distribute, or publish any data first produced in the performance of this contract, nor authorize others to do so, without prior written permission of the Project Officer. Under this contract, AHRQ retains unlimited rights in all data delivered under this contract, and in all data first produced in the performance of this contract.

Further, an organization's non-HCUP-related business shall remain completely separate from HCUP activities in data processing and handling and data dissemination. HCUP activities shall not be used as an opportunity to promote the organization and/or the organization's products (e.g., non-HCUP databases, software) and/or services. For example, the Contractor, in the course of answering HCUP data inquiries, shall not direct or suggest to the inquirer, the use of the organization's products or services, or direct them to others in the organization with such knowledge. Nor shall the Contractor use information obtain about the inquirer to promote non-HCUP related activities at a separate time. The Contractor shall make it clear that they are acting on behalf of AHRQ. Contractor staff assigned to HCUP responsibilities should not be engaged in

other organizational activities that may represent a conflict of interest to HCUP activities, or harm HCUP and AHRQ in anyway.

E. Management Plan

Offeror shall demonstrate their ability to achieve the delivery of performance requirements through the proposed use of corporate management and other personnel resources as well as demonstrate that the offeror's organizational structure and capabilities will meet the project's milestones in a timely and expeditious manner.

Overall Management Plan

Offerors shall show understanding of the requirements in the Statement of Work from a managerial perspective. In doing so, offerors shall describe the overall plan for organizing, staffing, and managing any subcontractors and consultants required by this contract. The plan shall indicate in detail how organizational roles and responsibilities will be divided, decisions made, work monitored, and quality and timeliness of products assured. Flow diagrams may be included to explain how tasks will be managed. The narrative should at a minimum address the following topics:

- a) demonstrate corporate experience in managing projects of a similar size and nature:
- b) labor skill mix determination (why you chose the skill mix for this project);
- c) personnel selection and assignment for key personnel, senior staff, and technical task leaders (why you chose an individual person for an individual job);
- monitoring and control of services provided: technical quality, responsiveness, cost control, and effective and efficient resource utilization, compliance with technical requirement and contract provisions;
- e) managerial problems offeror expects to encounter and methods proposed to solve these problems;
- f) project management tools (including software); and
- g) the ability and flexibility to respond rapidly to changes in budget, priorities, and schedule.
- 2. Indicate clear lines of authority and delineation of staff responsibilities.
 - a) Provide an organizational chart indicating clear lines of authority, delineating staff responsibilities;
 - b) Provide a person-level task-loading chart (staffing plan) including consultants and subcontractors showing all major tasks;

c) If the offeror proposes to use consultants or subcontractors to carry out work under this contract, Letters of Commitment from personnel other than current direct employees should be provided.

3. Start-up and Reporting

The offeror shall explain how this management plan demonstrates offeror's capability to start-up this project quickly, ensure that qualified personnel are available for individual tasks, conduct multiple complex tasks concurrently, and complete complex tasks within strict time frames. The offeror should also describe the plan for reporting the required technical and cost information to the Government (including problems and action needed in technical and cost areas), and the system for maintaining efficient use of computer and programmer resources.

F. Facilities and Equipment

The offeror shall describe the suitability, quality and cost-efficiency of their facilities and equipment (including computers) available for the performance of all requirements of this acquisition.

- G. Past Performance (See Section L.10)
- H. Small Disadvantaged Business Participation Plan (See Section L.11)

L.10 PAST PERFORMANCE INFORMATION

Offerors shall submit the following information (original and 5 copies) as part of their proposal for both the offeror and proposed major subcontractors:

- (1) A list of the last five (5) contracts and subcontracts completed during the past three years and all contracts and subcontracts currently in process that includes tasks directly related to the type of work to be required under this solicitation. Contracts listed may include those entered into by the Federal Government, agencies of State and local governments and commercial customers. Offerors that are newly formed entities without prior contracts should list contracts and subcontracts as required for all key personnel. Include the following information for each contract and subcontract:
 - a: Name of contracting activity
 - b: Contract number
 - c: Contract type
 - d: Total contract value
 - e: Description of work performed
 - f: Contracting Officer and telephone number
 - g: Program Manager and telephone number
 - h: Administrative Contracting Officer, if different from item
 - f: and telephone number
 - i: List of major subcontracts
- (2) The offeror may provide information on problems encountered on the contracts and subcontracts identified in (1) above and corrective actions taken to

resolve those problems. Offerors should not provide general information on their performance on the identified contracts. General performance information will be obtained from the references.

- (3) The offeror may describe any quality awards or certifications that may indicate the offeror possesses a high-quality process for developing and producing the product or service required. Identify what segment of the company (one division or the entire company) that received the award or certification. Describe when the award or certification was bestowed. If the award or certification is over three years old, present evidence that the qualifications still apply.
- (4) Each offeror will be evaluated on his/her performance under existing and prior contracts for similar products or services. Performance information will be used for both responsibility determinations and as an evaluation factor against which offeror's relative rankings will be compared to assure best value to the Government. The Government will focus on information that demonstrates quality of performance relative to the size and complexity of the procurement under consideration. References other than those identified by the offeror may be contacted by the Government with the information received used in the evaluation of the offeror's past performance.

The attached Past Performance Questionnaire and Contractor Performance Form (Attachment 2) shall be completed by those contracting organizations listed in (1) above. The evaluation forms shall be completed and forwarded directly to the following:

Sharon Williams
Agency for Healthcare Research and Quality
Division of Contracts Management
540 Gaither Road
Rockville, Maryland 20850
FAX: 301-427-1740

Evaluation forms must be received by <u>June 30, 2006</u> in order to be included in the review process. It is the responsibility of the offeror to ensure that these documents are forwarded to the Contracting Officer.

L.11 SMALL DISADVANTAGED BUSINESS PARTICIPATION PLAN

In accordance with FAR Part 15.304(c)4, the extent of participation of Small Disadvantaged Business (SDB) concerns in performance of the contract shall be evaluated in unrestricted acquisitions expected to exceed a total estimated cost of \$500,000 (\$1,000,000 for construction) subject to certain limitations (see FAR 19.201 and 19.1202).

A. All offerors, regardless of size, shall submit the following information (an original only is required).

A plan on the extent of participation of Small Disadvantaged Business concerns in performance of the contract. Participation in performance of the contract

includes the work expected to be performed by SDB concern(s). This can include SDB (as prime contractor), joint ventures, teaming arrangements, and subcontracts. Include the following information in SDB participation plans:

- 1. The extent of an offeror's commitment to use SDB concerns.

 Commitment should be as specific as possible, i.e., are subcontract arrangements already in place, letters of commitment, etc. Enforceable commitments will be weighted more heavily than non-enforceable ones.
- 2. Specifically identify the SDB concerns with point of contact and phone number.
- 3. The complexity and variety of the work SDB concerns are to perform.
- 4. Realism for the use of SDB in the proposal.
- 5. Past performance of the Offeror in complying with subcontracting plans for SDB concerns.
- 6. Targets expressed as dollars and percentage of total contract value for each participating SDB; which will be incorporated into and become part of any resulting contract.
- 7. The extent of participation of SDB concerns in terms of the total acquisition.
- B. SDB participation information will be used for both responsibility determinations and as an evaluation factor against which offeror's relative rankings will be compared to assure the best value to the Government. The Government will focus on information that demonstrates realistic commitments to use SDB concerns relative to the size and complexity of the acquisition under consideration. The Government is not required to contact all references provided by the offeror. Also, references other than those identified by the offeror may be contacted by the Government to obtain additional information that will be used in the evaluation of the offeror's commitment to SDB participation.

L.12 BUSINESS PROPOSAL

The offeror shall submit as part of the proposal a <u>separate</u> enclosure titled "Business Proposal." The Business Proposal shall include the Cost/Price Proposal, the Small Business Subcontracting Plan, and Other Administrative Data in accordance with the following:

A. Cost/Price Proposal

A cost proposal shall be submitted in accordance with FAR 15, in a format similar to Attachment 7. The offeror's own format may be utilized, but all required information in Attachment 7 shall be provided.

The business proposal must contain sufficient information to allow the Government to perform a basic analysis of the proposed cost or price of the work. This information shall include the amounts of the basic elements of the proposed cost or price.

As appropriate, cost breakdowns shall be provided for the following cost elements.

(a) Direct Labor

The estimated cost for all personnel who will be assigned for direct work on this project shall be included. Give the name, title, percent of effort or time, salary and fringe benefits for each employee.

Salary increases that are anticipated during performance of a resultant contract should be proposed as a cost. If escalation is included, state the degree (percent) and methodology, e.g., annual flat rate applied to a base rate as of a specific date or a mid-pointed rate for the period of performance. State whether any additional direct labor (new hires) will be required during the performance period of this procurement. If so, state the number required and anticipated date of hire. Also, specify the month and day on which your fiscal year commences.

(b) Supplies and Equipment

Include description, unit price, quantity, total price, justification for purchasing or leasing items and the basis for pricing (vendor quotes, invoices prices, etc.).

(c) Travel

The amount proposed for travel shall be supported with a breakdown which includes purposes, destination, duration, and estimated cost (transportation and per diem) for each proposed trip. If travel costs are proposed on the basis of your organization's established travel policy, a copy of the policy must be provided.

(d) Consultants

This element should include name(s) of consultant, number of days, and daily rate. The method of obtaining each consultant, either sole source or competitive, and the degree of competition or the rationale for sole source shall be explained.

(e) Subcontractors

Subcontractor costs shall be broken down and supported by cost and pricing data adequate to establish the reasonableness of the proposed amount. Support documentation should include degree of subcontract competition and basis for selecting source.

(f) Other Direct Costs

Any proposed other direct costs shall be supported with breakdown outlining the separate costs proposed and details supporting the formulation of the costs proposed. A signed agreement between the offeror and any personnel other than direct employees that includes dates of employment, salary, and specific tasks to be performed should be included.

(g) <u>Indirect Costs</u>

Indicate how you have computed and applied indirect costs, and provide a basis for evaluating the reasonableness of the proposed rates.

(h) Data Purchases

See section C.7.7. of the Statement of Work for assumptions on the cost of the data purchases from the HCUP Partners. Since the purchase of the data is more or less a pass-through cost, **proposals should not include fees on the proposed cost for data purchases from the state organizations.**

(i) Options

For each option delineated as "priced," (including the one 2-year option to continue the base effort) there should be a separate estimated budget within the business proposal. All options will be evaluated and may be exercised at award, at a later date or not at all depending on the needs of the government. Therefore the business proposal should include budgets for the base effort and each priced option which will allow us to pick and choose from the options deemed necessary.

Those options that are "unpriced" do not require a cost proposal at this time but a brief technical discussion should be included in the technical proposal. If it becomes necessary to exercise an unpriced option, the Contractor will be given a detailed Statement of Work for the option task and will be requested to submit a more detailed technical proposal and a cost proposal at that time.

B. Small Business Subcontracting Plan:

All offerors except small businesses are required to submit a subcontracting plan in accordance with the Small Business Subcontracting Plan, FAR 52.219-9, incorporated in this solicitation. A copy of the AHRQ model subcontracting plan is provided as an attachment to this solicitation. If the model plan is not used, all elements outlined must be addressed in the offeror's format. If the offeror is not a small business and fails to submit a subcontracting plan with the initial proposal, the offeror will be considered nonresponsive and their proposal will be returned without further consideration.

This provision does not apply to small business concerns. This provision does apply to all other offerors, including large business concerns, colleges, universities and non-profit organizations.

The term "subcontract" means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime contractor or subcontractor calling for supplies or services required for the performance of the original contract or subcontract. This includes, but is not limited to, agreements/ purchase orders for supplies and services such as equipment purchase, copying services, and travel services.

The offeror understands that:

- a. No contract will be awarded unless and until an acceptable plan is negotiated with the Contracting Officer. The plan will be incorporated in to the contract.
- b. An acceptable plan must, in the determination of the Contracting officer, provide the maximum practicable opportunity for small business concerns and small business concerns owned and controlled by socially and economically disadvantaged persons to participate in the performance of the contract.
- c. If a subcontracting plan acceptable to the Contracting Officer is not negotiated within the time limits prescribed by the contracting activity and such failure arises out of causes within the control and with the fault or negligence of the offeror, the offeror shall be ineligible for award. The Contracting Officer shall notify the Contractor in writing of the reasons for determining a subcontracting plan unacceptable early enough in the negotiation process to allow the Contractor to modify the plan within the time limits prescribed.
- d. Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.
- e. It is the offeror's responsibility to develop a satisfactory subcontracting plan with respect to small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals, and women-owned small business concerns, and that each such aspect of the offeror's plan will be judged independent of the other.
- f. The offeror will submit, as required by the Contracting Officer, subcontracting reports in accordance with the instructions thereon, and as further directed by the Contracting Officer. Subcontractors will also submit these reports to the Government Contracting Officer or as otherwise directed, with a copy to the prime Contractor's designated small and disadvantaged business liaison.
- g. For this particular acquisition, the AHRQ recommended goal (as a percentage of total contract value for the base period) is 30% for Small Businesses, which shall include at least 11% (as a percentage of total planned subcontract dollars for the base period) for Small Disadvantaged Businesses, at least 5% (as a percentage of total planned subcontract

dollars total planned subcontract dollars for the base period) for Women-Owned Small Businesses, and at least 3% (as a percentage of total planned subcontract dollars for the base period) for HUBZone Small Businesses and at least 3% (as a percentage of total planned subcontract dollars for the base period) for Veteran-Owned Small Businesses. These goals represent AHRQ's expectations of the minimum level for subcontracting with small business at the prime contract level. Any goal stated less than the AHRQ recommended goal shall be justified and is subject to negotiation.

C. Other Administrative Data

(1) <u>Terms and Conditions</u>: The proposal shall stipulate that it is predicated upon the terms and conditions of the RFP. In addition, it shall contain a statement to the effect that it is firm for a period of at least 120 days from the date of receipt thereof by the Government.

Minimum Bid Acceptance Period (April 1984)

- (a) "Acceptance period," as used in this provision, means the number of calendar days available to the Government for awarding a contract from the date specified in this solicitation for receipt of bids.
- (b) This provision supersedes any language pertaining to the acceptance period that may appear elsewhere in this solicitation.
- (c) The Government requires a minimum acceptance period of 120 days.
- (d) A bid allowing less than the Government's minimum acceptance period may be rejected.
- (e) The bidder agrees to execute all that it has undertaken to do, in compliance with its bid, if that bid is accepted in writing within (i) the acceptance period stated in paragraph (3) above, or (ii) any longer acceptance period stated in paragraph (4) above.
- (2) <u>Authority to Conduct Negotiations</u>: The proposal shall list the names and telephone numbers of persons authorized to conduct negotiations and to execute contracts.

(3) <u>Property</u>:

(a) It is HHS policy that contractors will provide all equipment and facilities necessary for performance of contracts. Exception may be granted to furnish Government-owned property, or to authorize purchase with contract funds, only when approved by the contracting officer. If additional equipment must be acquired, you shall include the description, estimated cost of each item and whether you will furnish such items with your own funds.

- (b) You shall identify Government-owned property in your possession and/or property acquired from Federal funds to which you have title that is proposed to be used in the performance of the prospective contract.
- (c) The management and control of any Government property shall be in accordance with HHS Publication (OS) 74-115 entitled, <u>Contractor's Guide for Control of Government Property</u>" 1990, a copy of which will be provided upon request.
- (4) <u>Royalties</u>: You shall furnish information concerning royalties which are anticipated to be paid in connection with the performance of work under the proposed contract.
- (5) <u>Commitments</u>: You shall list other commitments with the Government relating to the specified work or services and indicate whether these commitments will or will not interfere with the completion of work and/or services contemplated under this proposal.
- (6) <u>Financial Capacity</u>: You shall provide sufficient data to indicate that you have the necessary financial capacity, working capital, and other resources to perform the contract without assistance from any outside source. If not, indicate the amount required and the anticipated source. (Financial data such as balance sheets, profit and loss statements, cash forecasts, and financial histories of your organization's affiliated concerns should be utilized.)
- (7) Performance Capability: You shall provide acceptable evidence of your "ability to obtain" equipment, facilities, and personnel necessary to perform the requirements of this project. If these are not represented in your current operations, they should normally be supported by commitment or explicit arrangement, which is in existence at the time the contract is to be awarded, for the rental, purchase, or other acquisition of such resources, equipment, facilities, or personnel. In addition, you shall indicate your ability to comply with the required or proposed delivery or performance schedule taking into consideration all existing business commitments, commercial as well as Government.
- (8) Representations and Certifications: Section K, "Representations and Certifications and Other Statements of Offerors" shall be completed and signed by an official authorized to bind your organization. This section shall be made a part of the original business proposal.

L.13 SELECTION OF OFFERORS

- a. The acceptability of the technical portion of each contract proposal will be evaluated by the technical review committee. The committee will evaluate each proposal in strict conformity with the evaluation criteria of the RFP, utilizing point scores and written critiques. The committee may suggest that the Contracting Officer request clarifying information from an offeror.
- b. The business portion of each contract proposal will be subjected to a cost review, management analysis, etc.

- c. Past performance, Small Business Subcontracting Plan and the Small Disadvantaged Business Participation Plan of the technically acceptable offerors will be evaluated by AHRQ staff. A competitive range will be determined. Oral or written discussions will be conducted with all offerors in the competitive range, if necessary. All aspects of the proposals are subject to discussions, including cost, technical approach, past performance, Small Disadvantaged Business Participation Plan and contractual terms and conditions. Final Proposal Revisions will be requested with the reservation of the right to conduct limited negotiations after submission of the Final Proposal Revisions.
- d. A final best-buy analysis will be performed taking into consideration the results of the technical evaluation, cost analysis, past performance, and ability to complete the work within the Government's required schedule. The Government reserves the right to make an award to the best advantage of the Government, technical merit, cost, past performance, and other factors considered.
 - e. The Government reserves the right to make a single award, multiple awards, or no award at all to the RFP.

L.14 PROPOSAL INTENT

It is requested that if an offeror intends to submit a proposal to this solicitation that the attached Proposal Intent Form (Attachment 4) be completed and returned to the address indicated by June 1, 2006. The submission of the intent form is not binding on an offeror to submit a proposal, nor does the failure to submit the form prohibit an offeror from submitting a proposal. The purpose is to provide us with an estimated number of proposals to assist us in our planning and logistics for proposal reviews. We have added a request to include your contact information to a bidders list. The bidders list will be provided to interested offerors for subcontracting opportunities. In order for AHRQ to include your contact information on the bidders list, you must return the Proposal Intent Form and check the box that grants permission to add your name no later than the date listed above.

SECTION M - EVALUATION FACTORS FOR AWARD

TECHNICAL EVALUATION CRITERIA

Selection of an offeror for contract award will be based on an evaluation of proposals against four factors and award will be made to that responsible offeror whose proposal is most advantageous to the Government. The four factors are: scientific technical merit, cost, past performance, and the Small Disadvantaged Business Participation Plan. The scientific technical merit of the proposals will receive paramount consideration in the selection of the Contractor(s) for this acquisition. Offerors that submit technically acceptable proposals will then be evaluated for past performance and for their Small Disadvantaged Business Participation Plan. Following these evaluations a competitive range will be determined.

All evaluation factors, other than cost or price, when combined are significantly more important than cost or price. However, cost/price may become a critical factor in source selection in the event that two or more offerors are determined to be essentially equal following the evaluation of all factors other than cost or price. In any event, the Government reserves the right to make an award to that offeror whose proposal provides the best overall value to the Government. The Government reserves the right to make a single award, multiple awards, or no award at all.

THE GOVERNMENT RESERVES THE RIGHT TO MAKE AN AWARD WITHOUT DISCUSSION

All proposals will be reviewed in accordance with the governing regulations and AHRQ policies and procedures. The technical proposal, past performance information and Small Disadvantaged Business Participation Plan will be evaluated in terms of the offeror's responses to each of the evaluation factors. Each proposal will be evaluated on the likelihood of meeting the Government's requirements. The evaluation will be based on the technical and administrative capabilities in relation to the needs of the program, anticipated tasks, and the reasonableness of costs shown in relation to the work to be performed. The Government reserves the right to make an award to the best advantage of the Government.

The evaluation factors and assigned weights which will be used in the overall review of the offeror's proposal are outlined below. The technical proposal shall consist of the responses to evaluation criteria A through F (including subcriteria). The offeror should show that the objectives stated in the proposal are understood and offer a logical program for their achievement. The following criteria will be used to evaluate proposals and will be weighted as indicated in establishing a numerical rating for all proposals submitted. Factors facilitating the evaluation of each criteria below are referenced in the corresponding criteria found in Section L of this solicitation:

SECTION M. TECHNICAL EVALUATION CRITERIA

A. Understanding the Purpose and Objectives

10 points

The offeror will be evaluated to the degree to which the proposal demonstrates an understanding of the requirements and objectives of this acquisition, and the problems that are likely to be encountered.

B. Technical Approach

30 points

The offeror's technical approach will be evaluated on how clearly and concisely the proposal presents a detailed plan and approach that is complete, reasonable, and feasible to satisfy the requirement of each individual task in the Statement of Work. The 30 points will be distributed as follows:

Technical Discussion 24
Transition Plan 3
Quality Assurance Plan 3

C. Qualifications of Proposed Staff, Including Consultants

25 points

The background, skills, professional experience and education of key personnel, senior staff, task leaders, consultants and subcontractors shall be evaluated. Proposals will be evaluated on the degree to which the offeror is able to provide personnel possessing the qualifications listed on pages 58-62 of Section L, and on their designated responsibility on the project

*The experience and qualifications of the Project Director are worth a maximum of 5 points; the experience and qualifications of the other key staff and consultants are worth a maximum of 20 points.

D. <u>Organizational/Corporate Experience</u>

20 points

The Proposal will be evaluated as to the relevance and quality of corporate experience as it relates to the requirements of this acquisition.

E. Management Plan

10 points

The proposal will be evaluated on the appropriateness of the organizational structure and management systems, including the management of subcontractors, multiple simultaneous tasks with competing needs, the personnel assigned to each task and the labor hours proposed, the plan for ensuring availability of adequate staff, the plan for reporting the required technical and cost information to the Government, the system for maintaining efficient use of computer and programmer resources, and planned methods for assuring the successful completion of all tasks within the time and budget allocated.

F. Facilities and Equipment

5 points

The offeror will be evaluated on the suitability, quality and cost-efficiency of the computer and other facilities and equipment available for the performance of all requirements of this acquisition. In addition to computer hardware, the contractor must provide necessary computer software capability

TOTAL POINTS BEFORE PAST PERFORMANCE

100 points

G. Past Performance

20 points

(TO BE RATED ONLY AFTER A DETERMINATION OF TECHNICAL ACCEPTABILITY OF THE OFFEROR'S PROPOSAL, BASED ON THE ABOVE TECHNICAL EVALUATION CRITERIA)

The offeror's past performance will be evaluated after completion of the technical evaluation. Only those offerors determined to be technically acceptable will be evaluated. Each offeror will be evaluated on its performance under existing and prior contracts for similar products or services. Performance information will be used for both responsibility determinations and as an evaluation factor against which offeror's relative rankings will be compared.

The Government reserves the right to evaluate relevant past performance information not specifically provided by the offeror.

The Government will assess the relative risks associated with each offeror. Performance risks are those associated with an offeror's likelihood of success in performing the acquisition requirements as indicated by the offeror's record of past performance.

If the offeror or the proposed employees for the offeror, do not have a past performance history relative to this acquisition, or past performance not relative to this acquisition, the offeror will not be evaluated favorably or unfavorably on this factor. A neutral rating will be determined.

In evaluating past performance the Government, will consider the offeror's effectiveness in quality of products or services; timeliness of performance; cost control; business practices; customer satisfaction, and key personnel past performance.

NOTICE: Past Performance questionnaires are to be provided to the contracting office NO LATER than the closing date and time of this solicitation. It is the offeror's responsibility to ensure that these documents are forwarded to the contracting office.

H. Small Disadvantaged Business Participation Plan

5 points

The evaluation will be based on information obtained from the plan provided by the offeror, the realism of the proposal, other relevant information obtained from named SDB concerns, and any information supplied by the offeror concerning problems encountered in SDB participation.

Evaluation of the SDB Participation Plan will be a subjective assessment based on a consideration of all relevant facts and circumstances. It will not be based on absolute standards of acceptable performance. The Government is seeking to determine whether the offeror has demonstrated a commitment to use SDB concerns for the work that it intends to perform as the prime contractor.

The assessment of the offeror's SDB Participation Plan will be used as a means of evaluating the relative capability and commitment of the offeror and the other

competitors. Thus, an offeror with an exceptional record of participation with SDB concerns may receive more points and a more favorable evaluation than another whose record is acceptable, even though both may have acceptable technical proposals.

SDB participation will be scored with offerors receiving points from 0 to 5, with 5 being the most favorable.

ATTACHMENT 1 – STATEMENT OF WORK

CONDUCT AND EXPAND THE HEALTHCARE COST AND UTILIZATION PROJECT (HCUP) 2006 – 2011

TABLE	E OF CONTENTS	
C.1.	BACKGROUND INFORMATION	86
C.1.1.	HCUP PARTNERSHIPS	86
C.1.2.	DESCRIPTION OF HCUP DATABASES	
C.1.3.	DESCRIPTION OF HCUP-US WEB SITE	89
C.2.	OBJECTIVES	89
C.3.	SPECIFIC REQUIREMENTS	89
C.4.	PROVIDE QUALITY ASSURANCES	90
C.5.	RECEIVE HCUP MATERIALS AND TAKEOVER OPERATIONS	91
C.5.1.	RECEIVE HCUP MATERIALS	9
C.5.2.	TAKEOVER ONGOING OPERATIONS	
	2.1. Central Distributor	
	2.2. Provide Technical Support	
	2.3. HCUP-US Web site	
C.5.	2.4. HCUP Outreach and Dissemination Activities	
C.6.	DEVELOP AND IMPLEMENT A TRANSITION PLAN	94
C.7.	DATA ACQUISITION ACTIVITIES	95
C.7.1.	CONDUCT ONGOING COMMUNICATIONS REGARDING PROJECT ACTIVITIES	96
_	1.1. Recruitment Database	
	1.2. Communication on Project Activities	
	1.3. Conference Calls and Work Groups	
	1.4. Create and Maintain Data Acquisition Materials	
C.7.2. C.7.3.		
_	3.1. Maintain a Partner Contact List	
	3.2. Maintain an Inventory of Data Available from HCUP Partners	
C.7.4.	OBTAIN ANNUAL DATA FILES	
_	4.1. Identifying Changes that May Affect Data Submission	99
C.7.	4.2. Execute Memorandums of Agreement (MOA)	
	4.3. Prepare to Request Data	
	4.4. Implement Data Requests	
C.7.5.	RECRUIT NEW PARTNER STATES	
C.7.	5.1. Identify Potential Partner Organizations	
C.7.6.	EXECUTE MOA AMENDMENTS	
C.7.7. C.7.8.	PURCHASE DATAEXPLORE ADDITIONAL DATA TYPES FROM EXISTING HCUP STATE PARTNERS	
C.8.	PROCESSING AND CREATING STATE DATABASES	104
C 8 1	OR JECTIVES	104

C.8.2. REVIEW OF STATE SOURCE DATA	.108
C.8.2.1. Check that the Data to be Processed is Consistent with the MOA	.108
C.8.2.2. Check that the Coding of the Source Data is Consistent with the Documented	
Source Coding and the Processing Program	. 108
C.8.2.3. Check Validity and Consistency of Diagnoses and Procedures	
C.8.2.4. Exploratory Statistics to Check the Consistency in Coding with Previous Years.	
C.8.2.5. Other Checks and Documentation	.109
C.8.3. CREATE UNIFORM STATE DATA ELEMENTS FOR STATE DATABASES	
C.8.3.1. Apply Quality Control Edits	
C.8.3.2. Create Urban-Rural Patient Location Data Elements	
C.8.3.3. Add Data Elements as Directed	
C.8.3.4. Apply Clinical Classification Software (CCS)	
C.8.3.5. Apply the Diagnosis Related Groups (DRG) Grouper Software	
C.8.3.6. Apply the Latest Versions of Severity Adjustment Software to the Inpatient Data	
C.8.3.7. Apply Place of Service Flag to the Outpatient Data Files	
C.8.3.8. Median Income of ZIP Code to Data Development Files	
C.8.4. CREATE STATE FILES	
C.8.4.1. Create State Inpatient Databases (SID) Files	
C.8.4.2. Create State Ambulatory Surgery Databases (SASD) Files	
C.8.4.3. Create State Emergency Department Databases (SEDD) Files	
C.8.4.4. Extract Rotavirus Data	
C.8.4.5. Document Errors in Data Processing	
C.8.4.6. Create HCUP Central Distributor Files	
C.8.4.7. Customize Files	
C.8.5. DOCUMENTATION FOR SID/SASD/SEDD	
C.8.6. COPY AND DELIVER DATA AND PROGRAMS	
C.8.6.1. Copy and provide SID/SASD/SEDD Files for Return to States	
C.8.6.2. Copy Intramural Data for Delivery for AHRQ	
C.8.6.3. Copy of Data Processing Programs	
C.8.6.4. Copy of Summary Statistics	
C.8.7. CREATE PHYSICIAN FILES	
C.8.8. EVALUATE THE COLLECTION, PROCESSING, DOCUMENTATION AND DELIVERY METHOD	
FOR STATE DATABASES	.115
C.9. NATIONWIDE INPATIENT SAMPLE (NIS)	.116
C.9.1. CREATE THE NIS	.117
C.9.1.1. Select the NIS Sample	
C.9.1.2. Create the Hospital Weights File	
C.9.1.3. Create Deliverable NIS Core and Severity Adjustment Files and Produce	
Verification of Restrictions Memo.	117
C.9.1.4. Generate Databases to be Delivered for External Release.	118
C.9.1.5. Create the NIS File for use within AHRQ	
C.9.2. DOCUMENTATION FOR NIS	
C.9.2.1. Generate Documentation for the NIS	
7,7	
, ,	
C.9.3. OTHER NIS- RELATED ACTIVITIES	
C.9.3.1. New Data Elements	
C.9.3.2. Evaluate the NIS Sampling and Weighting Strategy	
C.9.3.3. Add New NIS Data Elements to Old Years of the NIS.	
C.9.3.4. Evaluate the Processing, Documentation, and Dissemination Procedures	. 120

C.10.	KIDS' INPATIENT DATABASE (KID)1	121
C.10.1.	CREATE THE KID1	121
C.10.2.	OTHER KID-RELATED ACTIVITIES1	122
	2.1. Assess the Sampling and Weighting Strategy	
C.10.	2.2. Assess the Processing, Documentation, and Dissemination Procedures	122
C.11.	MULTI-STATE AND NATIONWIDE OUTPATIENT DATABASES1	123
C.11.1.	CREATION OF MULTI-STATE DATA FILE1	123
C.11.2.	COMPARISON REPORT1	123
C.11.3.	DEVELOP THE CONCEPT OF A NATIONWIDE OUTPATIENT DATABASE (NEDD, NHASD), CREATE A TEST DATABASE	124
C.11.4.	EXTRACT THE DATA FROM THE OUTPATIENT DATABASES, MERGE DATA, CREATE	
	WEIGHTS, AND CREATE THE FILES1	
C.11.5.	DOCUMENT THE DATABASE1	
C.11.6.	OBTAIN AGREEMENT FROM STATES FOR RELEASE OF THE NEW DATABASE	
C.11.7.	PREPARE THE DATABASE FOR DISSEMINATION1	_
C.11.8.	DELIVER THE NEDD OR NHASD AND DOCUMENTATION1	
C.11.9.	DISSEMINATE DATABASES1	125
C.12.	NEW SPECIALIZED DISCHARGE-LEVEL DATABASE1	125
C.12.1. C.12.2.	DEVELOP THE CONCEPT, CREATE A TEST DATABASE, AND EVALUATE THE DATABASE1 EXTRACT THE DATA FROM THE SID, MERGE DATA, CREATE WEIGHTS, AND CREATE THE	Ξ
C 40 0	FILES	
C.12.3. C.12.4.	DOCUMENT THE DATABASE1 OBTAIN AGREEMENT FROM STATES FOR RELEASE OF THE NEW DATABASE1	
C.12.4.	PREPARE THE DATABASE FOR DISSEMINATION	
C.12.5. C.12.6.	DELIVER THE SPECIALIZED DATABASES AND DOCUMENTATION	
C.12.6. C.12.7.	DISSEMINATE DATABASES1	
C.13.	THE AMERICAN HOSPITAL ASSOCIATION ANNUAL SURVEY1	
C.13.1.	CREATE THE HCUP AHA ANALYTIC FILE	
	1.1. Annually Acquire the Most Recent AHA Annual Survey File	
	1.2. Check for Changes in Variable Set and Definitions	
	1.3. Create AHA Crosswalk Files	
	COMPARE AHA DATA WITH STATE DATA	
C.13.3.	CREATE FILE OF HOSPITAL STATUS CHANGES	
C.13.4.	DOCUMENT THE AHA FILES	
	4.1. Document AHA Annual Survey Changes	
	4.2. Document Variables	
C.14.	HCUP SUPPLEMENTAL / LINKABLE FILES1	129
C.14.1.	HCUP Cost-to-Charge Ratio (CCR) Files1	129
C.14.2.	DEVELOPMENT OF OTHER LINKABLE/SUPPLEMENTAL DATA FILES	
_	2.1. Market Area Competition Measures	
	2.2. Hospital Management and Organization: Supplementary Data	
	2.3. Process Quality Measures Created for CMS	
	2.4. Adding Variables from the AHA Survey	
	2.5. Evaluate and Create Readmission Variables	
C.14.	2.5.1. Readmission/Revisit variables limited to states with a reliable person identif	

_	.5.2. Readmission / Revisit variables limited to states without a person identifier of the control of the contr	
C.14.3.	ANNUAL MEMO RECOMMENDATIONS	
C.15. H	CUP CENTRAL DISTRIBUTOR	134
C.15.1.	OPERATIONS	135
	.1. Organization Restrictions for Central Distributor Operations	
C.15.2.	TRACKING SYSTEM	
C.15.3.	APPLICATIONS KITS	
C.15.4.	CUSTOMIZED FILES	
C.15.5.	MONTHLY ACTIVITY REPORTS	
C.15.6.	DATA USE AGREEMENTS (DUAS) AND MAILING LISTS	
C.15.7.	FLYERS, POSTCARDS, AND PROMOTIONAL MATERIALS	
C.15.8.	EXHIBIT BOOTH REPRESENTATION	
C.15.9.	EVALUATION OF DISSEMINATION PROCESSES AND TRACKING / DISTRIBUTION SYSTEM.	139
	DELIVERY AND MANAGEMENT OF DATABASES, DOCUMENTATION, AND ECORDS	140
C.16.1.	DATABASES	140
	.1. Database Format	
	.2. Source Data Destruction	
C.16.2.	DOCUMENTATION	140
C.16.2.	.1. Data File Maintenance System	140
	.2. Create Documentation	
	.3. Project Management Records	
	.4. Documentation Quality	
C.16.3.	BACK-UP SYSTEM FOR ALL DOCUMENTATION	
C.16.4.		
C.17. H	CUP-US WEB SITE	142
C.17.1.	MAINTAIN CONTENT ON THE HCUP-US WEB SITE	142
C.17.2.	HCUP- US WEB SITE POLICY AND REGULATIONS	
C.17.3.	HCUP-US WEB SITE FORMAT AND ACCESSIBILITY	
C.17.4.	ENHANCING THE HCUP-US WEB SITE	
C.17.5.	MANAGEMENT OF THE HCUP-US WEB SITE	
C.17.6.	TECHNICAL GUIDE TO WEB SITE	
	MPROVING HCUP DATA THROUGH TECHNICAL SUPPORT FOR PARTNERS.	
C.18.1.	BACKGROUND	
	FACILITATE COMMUNICATION WITH AND AMONG THE HCUP PARTNERS	
	.1. HCUP Partner Workgroups	
	.2. HCUP Partner Listserv	
	.3. Participation in Conferences and Other Meetings of HCUP Partners	
	.4. Review of Information about Relevant Federal and National Initiatives	
	.5. HCUP-US Partners' Web Page Sections on Data Collection and Use	
C.18.3. C.18.4.	NEEDS ASSESSMENT	
C.18.4. C.18.5.	CUSTOM DATA ANALYSIS FOR INDIVIDUAL HCUP PARTNERS	
C.18.6.	PARTNERING WITH DATA ORGANIZATIONS TO DETERMINE SOLUTIONS TO PERMIT THE	14/
J. 10.0.	INCLUSION OF VARIABLES IN THEIR DATASETS	148
C.18.7.		

C.18.7.1. Educational Briefs	
C.18.7.2. Special Report on the Collection and Improvement of Encounter-Level Data	
C.18.7.3. Summaries of Data Standards and Health Information Technology Meetings	
C.18.8. PRODUCTS FOR PARTNERS TO IMPROVE THE USE OF DATA	149
C.19. PROVIDE TECHNICAL SUPPORT TO AHRQ	150
C.19.1. PROVIDE TECHNICAL ASSISTANCE IN UNDERSTANDING AND USE OF DATA AND	
DOCUMENTATION SYSTEM	150
C.19.2. PROVIDE INFORMATION TO AHRQ ON GENERAL TECHNOLOGICAL INNOVATIONS	
AFFECTING HCUP DATA PROCESSING	151
C.19.3. Provide Information to AHRQ on Advances in Health Care Information	
TECHNOLOGY (HIT) RELEVANT TO HCUP	151
C.20. PROVIDE TECHNICAL SUPPORT TO HCUP USERS	152
C.20.1. Develop Staff and Infrastructure for Technical Support Services	152
C.20.1.1. Develop HCUP Expertise	
C.20.1.2. Establish Systems to Respond to and Monitor Inquiries	
C.20.1.2.1. Telephone and E-mail	
C.20.1.2.2. Routing Protocol	
C.20.1.2.3. Contractor Staffing Responsibilities	
C.20.2. PROVIDE TECHNICAL SUPPORT TO HCUP USERS	
C.20.2.1. Provide Assistance to Public Users	
C.20.2.2. Provide Assistance for Special Requests for Priority Audiences	155
C.20.3. MONITOR TECHNICAL SUPPORT SERVICES	
C.20.3.1. Log Technical Support Inquiries	155
C.20.3.2. Monitor Potential Impact from Technical Support Assistance	
C.20.3.3. Develop Standardized Responses and Limited Statistics	
C.20.3.4. Maintain and Update Technical Assistance Web Pages	
C.20.3.5. Use Technology for Outreach to HCUP Users	
C.20.4. IMPROVE AND DEMONSTRATE HCUP VALUE THROUGH USER FEEDBACK	
C.20.4.1. Encourage and Document Suggestions from Users	
C.20.4.2. Develop Impact Stories on the Value of HCUP Products	
C.20.5. DEMONSTRATE HCUP VALUE THROUGH OTHER MEANS	
C.20.5.1. Locate and Review HCUP Publications	
C.20.6. MAINTAIN A USER DATABASE	
C.20.6.1. Track HCUP Web site Visits	
C.20.7. PROVIDE AHRQ WITH TECHNICAL SUPPORT AND OUTREACH STATISTICS REPORTS	
C.21. DEVELOP EDUCATIONAL PRESENTATIONS AND TRAINING MATERIALS	
C.21.1. UPDATE EXISTING PRESENTATION MASTERS	
C.21.2. CREATE AND UPDATE NEW PRESENTATION MASTERS	
C.21.2.1. Create HCUP Training File	163
C.21.2.2. Create 3-Part Intermediate/Advanced Level Electronic Courseware	
C.21.2.3. Assess and Apply New Technologies for Training	
C.21.3. CUSTOMIZE MASTERS FOR SPECIFIC PRESENTATIONS	
C.21.3.1. Customize Presentations	
C.21.4. PROVIDE ALL PRESENTATION MATERIALS AND EQUIPMENT	
·	
C.21.4.2. Supply Presentation Equipment	

C.21.6.	REPRESENT HCUP AT CONFERENCES, MEETINGS AND OTHER VENUES	
	6.1. Deliver In-Person Expository and Training Presentations	
C.22.	MAINTAIN AND CREATE SOFTWARE TOOLS	168
C.22.1.	MAINTAIN AND UPDATE EXISTING SOFTWARE TOOLS	168
C.22.2.	PERFORM TOOL-RELATED ACTIVITIES AND IMPROVEMENTS	170
C.22.3.	CREATE NEW SOFTWARE TOOLS	170
C.23.	CONDUCT DATA ANALYSES AND WRITE ANALYTIC REPORTS	171
C.23.1.	SPECIAL TECHNICAL REPORTS	171
C.23.2.	WRITE DESCRIPTIVE AND ANALYTIC REPORTS FOR MULTIPLE HCUP SERIES	
C.23.2	P.1. Existing Report Series	173
	2.2. New Report Series	
	2.3. Recommend Report Topics	
C.23.2	2.4. Prepare Drafts and Final Copies	175
C.24.	INCREASE USE OF AND IMPACT FROM HCUP THROUGH OUTREACH	176
	DEVELOP, RECOMMEND, AND IMPLEMENT SELECTED OUTREACH INITIATIVES	
	1.1. Develop an Annual Outreach Plan	
	1.2. Implement Outreach Initiatives	
	CREATE, COORDINATE, AND DISSEMINATE WRITTEN MATERIALS	
	2.1. Create Announcements	
	2.3. Maintain HCUP Calendar	
	2.4. Create Outreach and Educational Materials	
	PROVIDE MANAGEMENT REPORTS ON OUTREACH	
C.25.	TRANSLATION OF DATA FOR USE BY SURVEILLANCE DATA SYSTEMS.	180
D C.27. S	EXPANSION OF HCUP OUTPATIENT DATA TO IMPROVE GEOGRAPHIC A EMOGRAPHIC REPRESENTATION AND TO IMPROVE TIMELINESS OF HCUP INFORMATION THROUGH NEAR REATREAMING OF DATA FROM STATE DATA ORGANIZATIONS	UP180 L-TIME
	EALTHCARE DISPARITIES REPORT (NHDR)	181
C.28.1.	DESIGN	
	1.1. Leadership	
	1.2. Design Decisions	
C.28.2.	NHQR/NHDR PRODUCTION2.1. Generating Hospital Weights	
	2.2. Creating the NHDR analytic sample	
	2.2.1. Build NHDR Analytic Sample	
	2.2.2. Evaluate NHDR Analytic Sample	
	2.3. Incorporating Population Denominators	
C.28.2	2.4. Reporting on American Indian/Native American	186
C.28.2	2.5. Applying QI Software	186
	2.6. Applying Significance Testing	

C.28.2.7. Quality Control	186
C.28.3. NHQR/NHDR PRODUCTS	187
C.28.3.1. Working Tables	187
C.28.3.2. Final Tables	
C.28.3.3. SID and NIS NHQR/DR Skinny Files	187
C.28.3.4. Task Documentation	187
C.28.4. SPECIAL ANALYSES	
C.28.5. COORDINATION WITH HCUP PARTNERS ON THE NHQR/N	
C.28.5.1. Prepare State-level Preview Materials for the HCUP	
C.28.5.2. NHQR/NHDR Briefing Materials for HCUP Partners	
C.28.5.3. Additional Communication with HCUP Partners	
C.28.5.4. Involve all Partners in the Final Review	190
C.29. CONFIDENTIALITY AND SECURITY PROTECTIONS.	190
C.29.1. BECOME FAMILIAR WITH ALL HCUP CONFIDENTIALITY ANI	SECURITY PROVISIONS 190
C.29.2. LEGAL PROTECTIONS	191
C.29.3. HCUP SECURITY PLAN	
C.29.4. EVALUATE MECHANISMS TO ENSURE SECURITY AND CON 192	FIDENTIALITY OF HCUP DATA
C.29.4.1. Conduct Security Audit	192
C.29.4.2. Annual Security and Confidentiality Evaluation	193
C.29.4.3. Provide Technical Assistance to Partners for Securit	y and Confidentiality of Data
C.29.5. MAINTAIN AND UPDATE ELECTRONIC PRIVACY TRAINING	Tools193
C.30. PROJECT MANAGEMENT	194
C.30.1. MEETINGS AND CONFERENCE CALLS	194
C.30.1.1. Prepare, Arrange, and Attend an Orientation Meeting	
C.30.1.2. Participate in Conference Calls with the Project Office	
C.30.1.3. Participate in Other Communications with the Project	
C.30.1.4. Participate in Annual HCUP Partners Meeting	
C.30.2. PREPARE AN ANNUAL PROJECT MANAGEMENT PLAN	
C.30.2.1. Annual Site Visit	
C.30.3. PROGRESS AND FINAL REPORTS	
C.30.4. PROJECT CLOSE-OUT	
APPENDIX A: HCUP Databases	
APPENDIX B: File Structure of the HCUP Databases	210
APPENDIX C: HCUP SOW List of Options	213

STATEMENT OF WORK CONDUCT AND EXPAND THE HEALTHCARE COST AND UTILIZATION PROJECT (HCUP) 2006 – 2011

The Center for Delivery, Organization, and Markets (CDOM) and the Data Development Portfolio within the Agency for Healthcare Research and Quality (AHRQ) of the United States Department of Health and Human Services (DHHS) requires the maintenance and expansion of the Healthcare Cost and Utilization Project (HCUP) for the next phase of the project (2006 – 2011).

HCUP (HCUP, pronounced "H-Cup") is a family of health care databases and related software tools, products, and services developed through a Federal-State-Industry partnership. It is the largest collection of longitudinal hospital care data in the United States, with all-payer, encounter level information beginning in 1988. HCUP brings together the data collection efforts of State data organizations, hospital associations, private data organizations, and the Federal government to create a national health care information resource that can be responsive to the needs of consumers, clinicians and other providers, institutions, health plans, purchasers, and public policymakers in order to improve health care quality and outcomes, control health care costs, and assure access to health care services. Analysts in government and non-government organizations, such as agencies within DHHS, Department of Homeland Security, state agencies, Institute of Medicine, March of Dimes, and large employers, have come to rely on HCUP data and tools to identify, track, analyze, and compare trends at the national, regional, and state levels. Additionally, because of the large size, the HCUP databases are used to describe patterns of care for both rare and common diseases; to analyze both infrequent and common hospital procedures; and to track utilization for population subgroups, such as minorities, children, women, and the uninsured. As such, HCUP is an integral part of AHRQ's mission to improve the quality, safety, efficiency, and effectiveness of health care for all Americans, including the delivery of health care in inner-city and rural areas (including frontier areas) and health care for priority populations (low income groups, minority groups, women, children, the elderly, and individuals with special health care needs).

The goals of HCUP in support of AHRQ's mission are to:

- Create and enhance a powerful source of national, state, and all-payer health care data.
- Produce a broad set of software tools and products to facilitate the use of HCUP and other administrative data.
- Enrich a collaborative partnership with statewide data organizations aimed at increasing the quality and use of health care data.
- Conduct and translate research to inform decision making and improve health care delivery.

To meet these goals, the project involves: 1) the annual recruitment, collection, creation, and enhancement of statewide and nationwide encounter-level data (list sections of RFP); 2) the sales and operation, and dissemination of the restricted access public release versions of HCUP databases and files; 3) maintenance and enhancement of the HCUP Web site which serves as the project's primary vehicle for public outreach and as a repository for nearly all project information; 4) facilitation of the collaborative learning among all members of the project (AHRQ, data Partners, users, stakeholders) by providing technical support and training; 5) development of products, tools and services to assist with the productive use of the data; 6)

data investigation, dissemination and translation of research findings; 7) outreach to increase use and impact from HCUP; and preparation of national reports on health quality and disparities.

C.1. BACKGROUND INFORMATION

HCUP began in the early 1990's and grew from 11 to 22 inpatient databases for years 1988 to 1997. The original goals of the project were to add data from more states, expand beyond inpatient data, shorten the data processing time, create tools and applications to make the data more useful, and expand accessibility and use of these tools and data to improve health care. The results over the last five years have vastly changed the initiative. HCUP inpatient data now includes 38 states and approximately 90% of all community hospital stays. Next year, HCUP expects to have emergency department (ED) data from 23 states and ambulatory surgery (AS) from 25 states. Data processing time has shrunk, the number of tools and special databases has grown exponentially, and 32 databases are available annually to the public. HCUP responds to over 1,800 technical assistance inquiries each year, and national and state policymakers are using these data and tools in their decision making. In addition, HCUP has increasingly been asked to take a leadership role in the development and use of administrative data.

The current HCUP contract now includes activities such as user support, electronic documentation, central data distribution, training, and expansion into outpatient data, among others. It is anticipated that the next five years will also be a period of immense change and will require innovative and forward thinking approaches to conducting HCUP. The next phase is designed around five strategies to increase the impact of HCUP: maintaining a strong core while enhancing data tools and measures; improving the timeliness of HCUP through information from the data, rather than the data themselves); preparing and implementing a strategy for taking advantage of the electronic health record and health information technology; focusing on data partnerships; and expanding outpatient data. Offerors are strongly encouraged to propose approaches and methodologies that take maximum advantage of state-of-the-art data and technology advances to carry the project forward over the next five years.

C.1.1. HCUP Partnerships

What has not changed, however, is that the core of HCUP is a partnership between the Federal government and state data partners (HCUP Partners), including state-funded data organizations (SDO) that are mandated by law to collect data; hospital associations that have voluntarily joined together to collect data; and private data organizations (PDO). The participation of State Partners (herein called HCUP Partners or data organization) is essential for the success of HCUP and is based on cooperative, detailed agreements made between AHRQ and each State data partner. HCUP could not exist without the contributions made by the statewide data organizations which voluntarily partner with AHRQ/HCUP and provide their state data to the project. Partners also serve as a source of ideas for project improvement, expansion, and technical guidance. HCUP Partners have been selected to join on the basis of a number of criteria, including geographic diversity, population concentration, and representation of important population subgroups, timely availability of data, and willingness and/or ability to release data for research purposes.

Currently data organizations from 38 states with participate as HCUP Partners. The 38 HCUP Partners as of March 2006 are: Arkansas, Arizona, California, Colorado, Connecticut, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts,

Michigan, Minnesota, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin. It is expected that all 38 State Partners will continue to participate in the project. Currently, there are 11 states not participating in HCUP. Of those, four states (AL, MS, ND, ID) do not collect statewide inpatient data and seven states and territories (AK, DE, MT, NM, OK, LA, WY and DC) collect data but do not currently participate in HCUP. AHRQ plans to continue to add all potential data partners who meet the HCUP criteria, although it expects that recruitment of new Partners will proceed slowly in the next five years. HCUP instead will emphasize the collection of outpatient data in collaboration with existing HCUP Partners.

C.1.2. Description of HCUP Databases

HCUP databases contain a core set of clinical and non-clinical information on all patients, regardless of payer—including persons covered by Medicare, Medicaid, private insurance, and the uninsured—translated into a uniform format to facilitate both multi-state and national/regional comparisons and analyses.

The HCUP databases are available for intramural research within AHRQ. Restricted access public release versions of many of the HCUP databases are available to the public through the AHRQ-sponsored HCUP Central Distributor. The content of the restricted access public release versions of the HCUP databases is developed in partnership with the participating data organizations. Because the participating data organizations dictate the release of specific data elements, the data elements on the restricted access public release databases are a subset of the data elements in the intramural databases. The HCUP databases are available to users who sign a Data Use Agreement (DUA). This agreement allows the data to be used for research and aggregate statistical reporting, but prohibits the identification of individual hospitals in disseminated materials.

The HCUP family of health services databases includes (See Appendix A for description of each type of database):

- HCUP state databases state-specific annual inpatient and outpatient data files
- HCUP nationwide databases nationwide samples derived from the HCUP state databases enabling focused research on special populations
- Other HCUP-related databases auxiliary databases that are used to augment information in the HCUP state and nationwide databases.

The availability and types of HCUP databases are depicted in Table 1 below.

Table 1 THE HCUP DATABASES							
HCUP Database	Database Name	Intramural Databases	Restricted Access Public Release Databases Released through the HCUP Central Distributor				
HCUP State Databases	State Inpatient Database (SID)	1988 forward	1990 forward				
	State Ambulatory Surgery Database (SASD)	1988 forward	1997 forward				
	State Emergency Department Database (SEDD)	1996 forward	1999 forward				
HCUP Nationwide Databases	Nationwide Inpatient Sample (NIS)	1988 forward	1988 forward				
	Kids' Inpatient Database (KID)	1997, 2000 and 2003	1997, 2000 and 2003				
Other Databases	American Hospital Association's Annual Survey of Hospitals (AHA)	1988 forward	None AHRQ use only				
	Demographic Data and Area Characteristics by ZIP Code	1980, 1988, 1990, 1993, and annually starting in 1999	None AHRQ use only				
	Physician Files	1999 forward	None AHRQ use only				

C.1.3. Description of HCUP-US Web site

The HCUP User Support (HCUP-US) Web site (http://www.ahrq.gov) provides detailed information on HCUP databases, tools, and products; and offers technical assistance to HCUP users. The HCUP-US Web site also serves as a central repository for all project information and contains the following types of information:

- General information about the project
- Database documentation for the state, nationwide, and other HCUP data files
- Links to HCUP tools and software
- References to new findings, publications, and research notes based on HCUP data
- Contact information for the HCUP Central Distributor and HCUP User Support
- Documents specific to the HCUP Partners and the acquisition of HCUP data
- HCUP Team documents
- Project management documentation

None of the HCUP databases are available through the HCUP-US Web site, but may be accessed through the HCUP Central Distributor.

Not only is the HCUP-US Web site useful to users of the data, but it is also one of the most important resources for understanding HCUP. Potential bidders should rely heavily on this Web site to gain information pertinent to this request for proposal.

C.2. OBJECTIVES

The objectives for this contract are to: 1) maintain and enhance HCUP databases and tools; 2) increase the usefulness of HCUP data and tools by turning data into timely end user information; 3) expand HCUP capacity for external and internal linkages; 4) provide technical expertise to make HCUP data and tools available to an expanded and diverse set of public and private users; and 5) prepare for a leadership role in educating and visioning for the future of the electronic healthcare record (EHR) initiative and administrative data.

C.3. SPECIFIC REQUIREMENTS

The contractor shall furnish the necessary personnel, materials, services, and facilities, and otherwise do everything necessary for or incident to the performance of the work described below.

The work will be conducted over a five year period, in five one-year phases. It is anticipated that during the first year of the contract, considerable effort will be needed for the contractor to establish and build the infrastructure to simultaneously contact and build a relationship with HCUP Partners, obtain, process, document, and deliver multiple databases of varying structures, and begin the process of collecting and preparing 2005 data (data for discharges occurring in calendar year 2005). The five year time period of the contract corresponds to data years 2005 through 2010. It is also expected that the Contractor shall prepare and disseminate HCUP Central Distributor files; conduct special analyses, provide technical support and training, and prepare the HCUP-based materials and statistics for the National Healthcare Quality and Disparities Reports. During each subsequent year, many individual tasks will experience growth and new activities will be added. Details on all tasks and activities are described below. The tasks described below are to be conducted on an annual basis unless otherwise noted. For

example, creation of the state databases, Nationwide Inpatient Sample (NIS), and operation of the Central Distributor are to take place in each project year, for each data year. The Contractor shall be provided with extensive documentation on the project and given access to all relevant materials describing past approaches and activities.

The Contractor is responsible for purchasing all data files and software needed for the project on behalf of AHRQ and for use of Contractor and AHRQ. Data obtained for the purpose of the performance of this contract, may not be used for any other purpose outside of the HCUP Contract.

Specific tasks to be performed by the contractor are described in the following sections.

C.4. PROVIDE QUALITY ASSURANCES

Provide Quality Assurance

The Contractor shall establish and adhere to a high level of software development, testing, documentation and quality control standards and procedures, in accordance with the SEI / CMM.

Also, the Contractor shall provide system administration and other database monitoring, tuning and administration software to support efficient and high quality operations of the data processing and data tasks under this contract. The Contractor shall deliver documentation of the proposed procedures and tools to be used for these functions and review the proposal with the Project Officer for concurrence.

The Contractor shall support efficient and secure computing operations and will utilize software workflow, document management, and other collaboration tools and products to support efficient operations of functions, processes and tasks performed under this contract. On a regular basis, the Contractor should evaluate and trim holdings to maintain efficiency. Prior to final closeout and accounting, the Contractor should create a schedule for trimming holdings. The trimming should be linked to the release of the corresponding source data when convenient. The contractor should plan to trim back to the final data files and the production programs, logs and listings, format programs and final supporting databases as part of the final close-out procedures (see Section C.30.4).

The Contractor shall deliver documentation of all proposed hardware, software, security, backup / recovery, networking and other Information Technology (IT) infrastructure components and solutions needed to support all HCUP contractual efforts and will obtain approval of the proposed solutions from the Project Officer.

The Contractor shall also assist AHRQ in preparing responses to periodic DHHS reporting requirements for accounting for information technology (IT) activities within the HCUP project. For example, DHHS requires that projects with an IT component distinguish between those costs which are Development/Modernization/Enhancement (DME) and those which are Steady State (SS) and report annually on these expenditures. The Contractor shall be able to provide support to AHRQ in assessing and reporting such information.

C.5. RECEIVE HCUP MATERIALS AND TAKEOVER OPERATIONS

C.5.1. Receive HCUP Materials

HCUP is an on-going project with a collection of data, documentation, and systems that will need to be transferred to the new Contractor. The Contractor shall maintain HCUP historical files back to the 1988 data year and materials to document the project.

The new Contractor shall be provided with a plan from the current Contractor that provides an inventory of and process for transferring HCUP data files, documentation, and software for use under the new contract. It is anticipated that there will be a 60 day overlap period with any current Contractor to facilitate the transfer of HCUP data.

The HCUP data and transition documents to be provided include:

- A report summarizing the work accomplished over the duration of this project. This
 report will include a description of the project overview, database components, a
 description of all processes used to generate data files, documentation, all major
 deliverables, and recommendations for future efforts.
- A report summarizing the recruitment status including an overview of completed activities for recruiting, retaining, and obtaining data from Partners; the status of receiving and purchasing 2005 data; and the status of exploratory statistics and continuity reviews for 2005 data.
- A document detailing the process and procedures for taking source data and producing final HCUP data. The document will include such activities as the initial continuity review, the processing of state data, the timing of creating the NIS sample and drawing the NIS sample.
- An accounting of all files (described at a summary level, such as year, state, and data type) that need to be transferred. It is anticipated that those files will include, but not be limited to:
 - All final (delivered) data files back to 1988 and including both the original 1988-1997 discharge data files
 - Those source and developmental files that have not yet been held for the two year period that provides AHRQ with a window in which to explore the data before the source data is destroyed
 - 2005 data year files that have been provided as of the end of the current contract period
 - The production programs, logs and listings, format programs that directly contributed to the creation of deliverable files
 - Final supporting databases, such as the recruitment database which tracks contacts and negotiations with Partners
 - All files and programs from the last two years of data processed, for which the source data is still available
 - Any holdings that would be critical for the new Contractor to provide these data services and support

Along with the files, the current Contractor shall provide a memorandum describing the organization of the files and their contents to assist the future Contractor. Limited, minimal assistance will be provided by the existing Contractor to answer questions about the files and data organization, and for questions about making the processor programs operational.

These files are documented in the project electronic documentation system, HCUP-US. The source and developmental files are documented through directory path and file naming conventions.

C.5.2. Takeover Ongoing Operations

Several existing tasks that support HCUP data users and/or ensure data security will remain in operation under the existing Contractor during the transition period leading to the start of the new contract. These activities include the HCUP Central Distributor, HCUP-US Web site and provision of Technical Assistance all of which require an overlap period of operation for activities to be transferred (if necessary) without interruption to another Contractor. Information technology activities will also need to continue in a reduced manner during the overlap in support of the other transition activities. These activities, among others, will be taken over using existing operations and systems and will not need to be re-established from a new starting point.

At the conclusion of the transition period, the existing Contractor will account for and transfer all HCUP data files and programs to the new Contractor.

C.5.2.1. Central Distributor

The new Contractor will be provided with the following information to document the status of the Central Distributor task at the close of the contract:

- A copy of the Central Distributor Tracking System.
- A list of products this will note the 2004 updates that have not been completed, as well as what states and data types are available for the state databases. NIS, Kids' Inpatient Database (KID), and cost to charge files will be tracked on a separate list.
- A file documenting the status of Central Distributor amendments this will note outstanding amendments and, if known, the reasons why the amendment has not been returned.
- Final statements regarding customer payment accounts.

It is expected that the transfer will be carried out in two phases.

Phase I: First Month

In this phase, the current Central Distributor Contractor shall continue to accept inquiries, applications and payments; assemble and ship binders; enter data into the tracking system; prepare and mail the activity report and state reimbursement checks and process DUAs.

In addition to continuing normal operations, the Central Distributor will start transition activities. During phase I, it is anticipated that the Central Distributor will:

- Include a transition flyer in all binders and a transition notice in all e-mail.
- Coordinate with AHRQ to maintain the security and confidentiality of all materials.
- Provide limited, minimal training to the new Contractor's staff to answer questions about the Distributor materials and processes.

- Arrange for automatic forwarding of e-mail and calls to the toll free telephone number. It
 will not be possible to transfer the e-mail address or fax number to a new Contractor. It
 might be possible to transfer the toll-free telephone number.
- Begin reviewing and closing out the customer payment accounts.
- Specify procedures for handling payments received from customers after the end of the contract. Purchase orders will not be accepted two months before the end of the current contract. This will prevent the possibility of payments being received after the 60-day transition period.

Phase II: Second Month

In this phase, the current Central Distributor Contractor shall cease operations and concentrate on redirecting contacts to the new Contractor, answering the Contractor's questions, and transferring all project materials to the new Contractor, or AHRQ. The new Contractor shall assume full responsibility for daily operations on a mutually agreed upon date approximately one month after the initiation of the transition. This will provide a full month of overlap between the two Contractors so that coordination and technical support can continue while maintaining customer service. It is anticipated that the main activities of this phase will be:

- New Contractor technical support as needed to maintain continuous operations.
- Packing and shipping all project materials to the new Contractor or AHRQ.
- Reviewing accounts receivable and planning state reimbursements. It is highly likely that payments for data will still be arriving after two months have elapsed.

The current Contractor will provide AHRQ and the new Contractor with the following materials:

- A list of outstanding data requests, along with their progress toward completion.
- The binders that contain Partner-specific data element restrictions, price sheets, and relevant e-mail information.
- A final accounting of funds accepted and disbursed.

C.5.2.2. Provide Technical Support

The HCUP-US Technical Assistance task will remain in continuous operation during the transition period. The current Contractor will provide minimal transition support to answering Contractor questions for the two weeks of the transition period.

The current Contractor will provide AHRQ and the new Contractor with the following materials:

- A brief guidance document that serves as a procedure manual for providing technical assistance to users. This document will minimally include a description of processes, procedures, specific instructions for particular types of requestors (e.g., Federal Agencies), and an appendix of standard responses to technical assistance requests.
- Statistics on the most recent technical assistance contacts. (The existing database that maintains information on these contacts is now considered obsolete and will not be provided.)

C.5.2.3. HCUP-US Web site

The HCUP-US Web site will also remain functional during the transition period. The Government will provide a transition plan for the operation of the HCUP-US Web site which will:

- Identify all the steps necessary to complete the transition
- Present the schedule for transition, including any need for overlap with the current Contractor in order to keep operations running
- At the agreed upon date, will also provide an electronic "snap-shot" of the full contents of the entire HCUP-US Web site.

The Contractor will take over, manage, and run the existing Web-site and will not re-create it.

C.5.2.4. HCUP Outreach and Dissemination Activities

A brief Closeout Report of HCUP Marketing Activities that summarizes the work accomplished during the 2006 calendar year through the end of the HCUP contract will be provided to the new Contractor. The report will summarize activities including the number of press releases (and topics), number of exhibit booths (and conference names), how many presentations were given (and conference and/or location name), and what new products were released (brochures, fact books, highlights, databases, etc.

C.6. DEVELOP AND IMPLEMENT A TRANSITION PLAN

Within two weeks of effective date of this contract (edoc¹), the Contractor shall develop a draft plan for:

- Transitioning HCUP activities from the previous Contractor
- Taking over the on-going operations of the Central Distributor, Technical Assistance, and HCUP-US Web site
- Receiving, inventorying, and safeguarding the project materials including data files, software, and documentation developed under the previous contract
- Developing a security plan for ensuring the confidentiality of data
- Establishing an appropriate accounting system
- Building HCUP databases
- Contacting and building relationships with HCUP Partners during the transition period

A final plan, subject to Project Officer review and approval, will be developed within four weeks of edoc. The final plan will utilize the transitional materials from the existing contract which will be provided by the Government.

¹The term "edoc" is used in this document to refer to effective date of contract, hereafter referred to as effective date.

C.7. DATA ACQUISITION ACTIVITIES

The process of HCUP data acquisition requires effective communication, organization, detailed record-keeping, and a high level of professionalism. Activities are focused on retention of existing Partners, recruitment of new Partners, purchasing, receipt, and initial evaluation of data. HCUP Partners include data collection programs of various sizes and configurations; state government agencies, hospital associations, and private data organizations. Some HCUP Partners have many years of experience in the collection and use of administrative data while others have relatively new programs. Some HCUP Partners have a great deal of experience in the release of their data for research purposes, while for others, HCUP is the first and only release of data outside of their own organization. HCUP relationships with Partner organizations are critical for success of the project and are formalized via detailed, negotiated Memorandums of Agreements (MOAs) that specify use and restrictions for each Partner's data. Therefore, a critical role for the Contractor is to alert AHRQ staff to any Partner issues that affect successful participation in HCUP.

All HCUP Partners provide inpatient data to HCUP. In some cases, the HCUP Partner can also provide ambulatory and emergency department data. Some Partners may not have collected outpatient data in the past, but have plans to do so in the future. For most Partners, producing data for HCUP is a quick and easy process because they are familiar with selling their data to outside researchers and have effective mechanisms for producing the files. However, for other Partners, release of data to AHRQ is more difficult. In some cases, Partners may have a small and already overburdened data processing staff. Some organizations have elaborate approval processes for releasing data to external parties. The Contractor should anticipate some variation in the level of effort to oversee the data request process through each level of approval.

The Contractor shall provide a dedicated team to perform all activities related to acquisition of data for the project. The team should work closely with other members of the project. For example, the HCUP Central Distributor team needs to know when a new data release will be available so they can update the HCUP Application Kit. Activities related to data acquisition include, but are not limited to:

- Conduct ongoing communications regarding project activities
- Explore and document the availability of data in all Partner states as information is received
- Maintain information (inventory) of current and future data types and data availability in all fifty states
- Execute signed documents such as MOA; Amendments to MOAs, DUAs, letters of communication, etc.
- Contact all Partners on a regular basis to acquire data, clarify content of files, clarify allowed use of the data, etc.
- Set up, participate in, and take summary notes for workgroups and/or conference calls between HCUP Partners and AHRQ staff to discuss issues related to data use
- Maintain an electronic record of contacts made with HCUP Partners

In general, data acquisition activities are underway throughout the entire year. It is the Contractor's responsibility to coordinate contacts with Partners toward the goal of keeping Partner's burden of time and effort to a minimum.

C.7.1. Conduct Ongoing Communications Regarding Project Activities

The Data Acquisition Team will have the capability to effectively communicate information on the following topics:

- HCUP objectives
- Process for creation of HCUP databases
- HCUP policies and procedures for developing, distributing, and ensuring the confidentiality of project databases
- Resources and benefits available to HCUP Partners
- Minimum participation requirements
- Data elements that HCUP requests from Partners
- Data submission procedures and timelines

C.7.1.1. Recruitment Database

Data acquisition activities require ongoing communication with HCUP Partners; however, it is a project goal to keep the burden of communication to a minimum for participating data organizations. The Contractor shall maintain a record of when Partners are contacted and any key information obtained to allow for an efficient communication process. The Contractor should plan to use the existing "Recruitment Database" for the first year of this contract. In the second year, the Contractor shall evaluate the Recruitment Database, and if indicated, make recommendations for improvements.

C.7.1.2. Communication on Project Activities

The Contractor shall communicate about project activities so that HCUP Partners keep abreast of various issues that arise during the course of the project. These issues include future AHRQ research activities and new databases or products that the project is considering. Various approaches used previously to communicate with HCUP Partners include the Annual Activities Report http://www.ahrq.gov/fund/contarchive/rfp060009.htm, e-mail, the HCUP LISTSERV (maintained on the AHRQ server), and the HCUP newsletter "e-News." Additional or alternative approaches may also be considered for the future. The Contractor shall maintain an up-to-date e-mail listing of HCUP Partners for communication purposes.

C.7.1.3. Conference Calls and Work Groups

The Contractor shall provide support for conference calls and/or work group meetings held over the phone for data acquisition efforts. Support includes scheduling coordination, conference call set-up, and summary note-taking with distribution to participants via e-mail. For budgeting purposes, the contractor should assume up to two workgroups of 3 calls per contract year.

C.7.1.4. Create and Maintain Data Acquisition Materials

The Contractor shall create and maintain various materials to be used for the purpose of data acquisition activities. Examples from the past include:

• Updates to the HCUP Data Use Agreement

- Annual update to <u>Sample Memorandum of Agreement (in the Overview Binder)</u> http://www.ahrq.gov/fund/contarchive/rfp060009.htm
- The HCUP Annual Activities Report (in the Overview Binder)
 http://www.ahrq.gov/fund/contarchive/rfp060009.htm is released each spring to describe the project's previous year's accomplishments and detail plans for the upcoming year. For some HCUP Partners, the report fulfills a requirement for annual reporting of data use. The report should incorporate:
 - Highlights/project achievements of the past year including data collaborations, and publications
 - Objectives for the coming year including database development, tools, reports, and Partnership expansion
 - o Current intramural exploratory and research studies
 - Abstracts of HCUP projects planned for upcoming year
- The annual <u>HCUP Overview Binder http://www.ahrq.gov/fund/contarchive/rfp060009.htm</u> is a collection of materials that contains information on all aspects of HCUP. It is a tool that provides an introduction to the project, and includes information on HCUP participation and benefits.
- The Partner-Specific Requirements Report catalogs all information about unique Partner restrictions on the creation of the HCUP databases and their use. For example, there are restrictions that vary from State to State on which data elements may be included in the SID restricted access public release databases released through the Central Distributor. This report is referenced during recruitment and database development to ensure that the Partner's restrictions are followed. An example can be found in "NIS Data and State-Specific Restrictions".

To maintain the smooth operation of the data acquisition process, the Contractor shall use the existing data acquisition materials (above) during the first year of the contract. Recommendations for changes or refinements in materials can be made in subsequent years of the contract if desired.

C.7.2. Participate in the Annual HCUP Partners Meeting

Once per year all HCUP Partners are invited to the HCUP Partners' Meeting in the Washington D.C. area. The meeting is coordinated and led by AHRQ staff. The meeting lasts two to three days and includes sessions on current and future project activities, formal presentations on research projects that use HCUP data, and sessions that discuss new approaches and methods. The opinions of the Partners will be elicited to provide guidance in directing the project. The Contractor should provide two recruitment task leaders to attend the annual Partners meeting. Up to three times during the course of this contract, the Contractor may be asked to make a presentation at the Partners Meeting on recruitment or data issues.

C.7.3. Retain Existing Partners

Retaining Partner participation in the project is an important and ongoing process. HCUP and HCUP Partners function within an environment of change as a result of new Federal regulations (e.g., the Health Insurance Portability and Accountability Act (HIPAA)), revised state requirements for releasing data, and other considerations such as funding fluctuations at the State and Federal level. It is not unusual for several HCUP Partners to change staff over a

year's time, meaning there are changes in the appointed contact person that the HCUP team will be working with. When staff changes occur at Partner organizations, the Contractor is responsible for contacting new staff, explaining the project in detail, answering questions and providing project materials such as the Annual Activities Report, the Overview Binder, and the MOA.

C.7.3.1. Maintain a Partner Contact List

Each HCUP Partner organization has an official representative that serves as the primary contact to HCUP. The official Partner representative, who has authority to sign documents for their organization, may be different from the person who handles routine communications with HCUP staff. The Contractor shall maintain two versions of up-to-date Partner contact lists, reflecting the official Partner representative (MOA contacts) vs. other representatives if applicable in each Partner organization. The Contractor shall also maintain up-to-date e-mail lists of HCUP Partners and other representatives from Partner organizations.

C.7.3.2. Maintain an Inventory of Data Available from HCUP Partners

Through-out the year, important information is obtained about what data is available and what new types of data are under development. In the course of routine contacts with HCUP Partners, the Contractor shall maintain up-to-date information on data availability. This database / inventory will allow HCUP to keep abreast of the type of data available from Partners, anticipated release dates, and other information relevant to the data acquisition process. On an annual basis, the Contractor shall revise and deliver an updated Data Inventory that includes, at a minimum, a summary section, recommendations for new Partner recruitment, and a brief table of information for every state in the U.S. Information contained in the Inventory is likely to include:

- State population
- Number of community and non-community hospitals
- Number of discharges
- Type of data collected and released (data of all kinds (encounter/claims/state sponsored surveys), data that might link to or complement administrative data)
- Region of the US as defined by HCUP
- Legislative mandates related to data collection and dissemination
- Future plans
- Exceptions or exclusions for participation

C.7.4. Obtain Annual Data Files

Obtaining annual data files requires that the Data Acquisition Team contact each HCUP Partner to request data from the previous year. For example, work to obtain calendar year 2005 data will begin in calendar year 2006. The Contractor shall obtain annual inpatient data files and, when applicable, ambulatory surgery and/or emergency department data files from each HCUP State Partner. The annual data procurement process involves:

- Identifying changes that may affect data submission
- Preparing to request the data
- Implementing the data request
- Executing a MOA

A detailed description of each of these activities is provided below.

At the beginning of the contract, it is expected that the 2004 data cycle will be completed and part of the work for the 2005 cycle will have begun. To ensure an uninterrupted progression of data collection from HCUP Partners, the current Contractor shall complete activities that are customarily performed at the start of each data year cycle where possible; maintain and update Partner contractual agreements (MOAs, IRB applications, and other agreements); proceed with requesting and acquiring data for the 2005 data year; and examine inpatient, ambulatory surgery (AS), and emergency department (ED) data sets received from Partner organizations. The Partnership will be expanded to include additional outpatient data sets for 2005; however, no new Partner organizations will be recruited. It is anticipated that up to one-third of the 2005 source data sets by the end of the current contract period will be received by the current Contractor. The current Contractor will have also begun recruitment of up to three new SASD and five new SEDD data sets for the 2005 data year from existing Partners.

The Contractor will be provided a Recruitment Status Report which will summarize completed activities for recruiting, retaining, and obtaining data from Partners; the status of receiving and purchasing 2005 data; and the status of exploratory statistics and data reviews for 2005 data. This report will provide an overview of the HCUP Partnership at the end of the contract period and will catalogue completed and outstanding work on the 2005 data cycle.

For the purposes of planning, the Contractor can expect the 2005 data to include up to 86 databases: 38 SID; 25 SASD, and 23 SEDD. It is expected that the current Contactor shall have obtained 2005 data for 28 of the 86 databases by the end of the contract—11 databases by July 1; an additional 10 databases by August 15; and the remaining seven databases after August 15. The Contractor can assume that preliminary data reviews were conducted on any data received by the current Contractor by July 1, 2006. For data received from July 2 through August 15, 2006, only brief, exploratory statistics will be run to verify that the data is readable. Partner source data received from August 15 through September 8, 2006, will be accepted and stored only. Depending upon the Partner's direction, the source data will be transferred to the new Contractor, transferred to AHRQ, or returned to the Partner.

C.7.4.1. Identifying Changes that May Affect Data Submission

At the onset of the data procurement process, the Contractor shall interview all HCUP Partners by phone to identify changes that could impact data submissions to HCUP. The interview explores issues such as:

- Increases or decreases in the state's data price
- Newly available data elements
- Potential Partner decisions to withhold a data element previously submitted
- New limitations placed on the contents of its source files (e.g., masking particular values of a data element)
- New withholding of discharge records with particular characteristics (e.g., substance abuse or HIV diagnosis)
- New administrative requirements for obtaining data (e.g., Institutional Review Board (IRB), application, or committee review).

The Data Acquisition Team will document the interview results in the Recruitment Database, and Data Inventory and coordinate with AHRQ on any necessary follow-up activities.

C.7.4.2. Execute Memorandums of Agreement (MOA)

The MOA formalizes Partner participation by specifying the rights and responsibilities of AHRQ and the participating statewide data organization. The MOA specifies the type of data (i.e., inpatient, ambulatory surgery, and/or emergency department) and specific data elements that the Partner will supply for inclusion in the HCUP databases. The MOA also identifies which data elements the Partner allows to be used internally for AHRQ intramural research and which may be released outside of AHRQ in "restricted access public release" versions of the data. Each year, the Contractor shall update an HCUP Sample MOA to be used as a template for state-specific MOAs. http://www.ahrq.gov/fund/contarchive/rfp060009.htm

Completing a request for data encompasses any or all of the following:

- Completing a data application
- Coordinating an in-person presentation by AHRQ and/or Contractor staff to an IRB or other committee (Currently, one state requires in person appearances, and it can be expected that approximately two more visits will be required for data acquisition purposes each year)
- Assembling and distributing project documentation to an IRB or other review committee
- Completing a state-specific MOA and supplemental documents such as a state-specific DUA.

C.7.4.3. Prepare to Request Data

To optimize the timing of data requests, the Data Acquisition Team will monitor Partners' annual data release dates. The release date is the date on which the state's data file is ready to be released to outside researchers. Partners typically schedule these releases 5 to 13 months after the end of the previous calendar year, with most Partners scheduling their release for September or October.

The Contractor should aim to obtain data within one month of the release date; however, Partners frequently delay their original release date for any number of reasons (e.g., delays in receiving the data from hospitals, system upgrades, changes in file structure, etc.). Accordingly, the Contractor must continually monitor the status of the release dates in order to secure data as soon as is feasible. Because some data organizations only review data requests on a quarterly schedule, the contractor should adjust their request cycle to coincide with the Partner.

To save time and effort in obtaining annual files, the Contractor should try to execute MOAs that allow use of data and continued participation for more than one data year, preferably for the life of this contract. If Partners will not permit data applications to include future years of data beyond the one requested, a new application will have to be completed each year. Preparing a data application may require significant time and effort, even if the request is an update of the prior year's application. Each state has it own format and questions. The Contractor should anticipate that each year, some Partner applications will change to reflect new policies and organizational concerns. It is expected that most Partners will require annual amendment to their MOA and a few Partners will require a full, multi-year MOA.

C.7.4.4. Implement Data Requests

The Contractor should prepare a written request for the data; billing information and relevant file documentation. The request should be individualized for each Partner based on their circumstances and requirements. The data request letter should be prepared and sent in advance of the Partner's scheduled data release. The Contractor should actively pursue any data not received on schedule.

C.7.5. Recruit New Partner States

The Contractor shall be responsible for recruiting new states and databases into the project. Recruiting new states into the project is a long-term process that can range in time from three months to two years. Many considerations are involved in the decision to invite a statewide data organization to participate in HCUP, e.g., how long they have collected data (experience), quality and comprehensiveness of data, geographical representation, ability to disclose data, state population, etc. The Contractor shall compile relevant information on potential statewide data organizations. In some cases, only inpatient data will be available from the potential Partner and in other cases, outpatient data will also be available.

To qualify for participation in HCUP, a state must be able to submit:

- Inpatient data from all or nearly all community hospitals in the state.
- All-payer discharge data i.e., data elements that identify private, Medicare, Medicaid, uninsured, and other insurance payers for each discharge
- A minimum set of data elements from inpatient discharge records i.e., diagnosis and procedure codes; expected primary payer; total charges; patient demographics such as age, sex, and ZIP Code; and hospital identifiers

C.7.5.1. Identify Potential Partner Organizations

Every year, the Contractor shall investigate two to four statewide data organizations for potential participation in HCUP to reach a goal of 44 Partners at the end of this contract period. Identification of these data organizations will be based on information gained from the Data Inventory, recommendations from the Contractor and guidance from AHRQ. The Contractor shall conduct brief feasibility assessments specific to one or just a few states and include information on the strengths and deficiencies of the state's data files. Depending on the number of states being evaluated for recruitment, the Data Acquisition Team should recommend recruitment priorities.

AHRQ determines which data organizations are the best candidates to approach for participation in the project, and then the Data Acquisition Team will make contact with the potential Partner and begin the process of communication and education. The Data Acquisition Team will gather additional information before a final decision is made. This information includes:

- Level of interest in becoming an HCUP Partner
- Data limitations resulting from state statutes or release policies
- Availability of full year, non-aggregate data for all conditions and procedures
- Willingness to allow HCUP to utilize hospital identifiers in the creation of HCUP databases, tools, and products

Ability to meet the project's data submission schedules.

The Data Acquisition Team will have the capability to educate potential Partner/s on the following topics:

- HCUP objectives
- Process for creation of HCUP databases
- HCUP policies and procedures for developing, distributing, and ensuring the confidentiality of project databases
- Resources and benefits available to HCUP Partners
- Minimum participation requirements
- Data elements that HCUP requests from Partners
- Data submission procedures and timelines

If there is general agreement on the terms of HCUP participation, the Contractor should initiate execution of the MOA.

C.7.6. Execute MOA Amendments

MOAs need to be amended from time to time. For example, the Partner may:

- Agree to submit a data element not previously supplied
- No longer agree to submit a data element previously submitted
- Place new limitations on the content of source files
- Place new limitations on the release of information on HCUP restricted access public release databases

Whenever an MOA amendment is necessary, the Contractor shall secure the approval of both the Partner and AHRQ. Most often, formal signature is not required; instead, the Partner acknowledges the addendum with an e-mail or by initialing the MOA. The team coordinates all aspects of the process, including negotiating or clarifying issues with Partners, problem-solving with AHRQ, and coordinating internally, as needed, with the Data Processing Team. Amendments to the MOA may require approval by the Partner's executive council, board, or data review committee, although this is usually expedited by the existing HCUP relationship.

C.7.7. Purchase Data

The Contractor shall be responsible for all aspects of the purchase of source data from HCUP Partners. There is a wide range of costs to purchase data, but in the first year, the contractor should calculate an average cost of \$6,000 per data year for each data setting (inpatient, ambulatory surgery, and emergency department) or an estimated \$500,000 for a full year of all types of Partner databases. Currently, costs for purchasing data are contingent on the pricing policies of the data organizations and can increase or decrease from year to year. Therefore, it is recommended that budgets include an increase of 5 percent for each subsequent year in addition to the costs for new data sets per year. It should be noted that the data organization itself is solely responsible for setting and publishing their data price. Any negotiations or discussions related to data price shall be brought to the Project Officer's attention. The Project Officer must also be advised of any significant increase or decrease in data purchase price. The funds budgeted for data purchase are to be reserved for this activity alone and may not be

shifted for other project costs without Project Officer approval. No fees should be included on the cost of the purchase of data.

It can be assumed that the current Contractor shall purchase source data from approximately one-third of the 2005 source data. (In year 1, it is assumed that the current Contractor will receive and pay for 28 databases at a cost of approximately \$170,000, thereby reducing first year data purchase costs for 2005 data.) In future years, AHRQ may implement a different payment approach to the HCUP Partners and will work with the Contractor to put into place any changes. The following Table 2 demonstrates the total number of databases that the Contractor should anticipate during the contract period.

Table 2 HCUP DATA ACTIVITIES Total number of databases by type and year of contract						
Contract Year	Data Year	Inpatient Databases	Outpatient Databases Total Databases			
		(States)	AS	ED	Total	
1	2005	38	25	23	48	86
2	2006	41	26	25	51	92
3	2007	43	27	26	53	96
4	2008	44	29	27	56	100
5	2009	44	32	28	60	104

AS = ambulatory surgery

ED = emergency department

Data for any particular calendar year generally becomes available for purchase from the statewide data organizations throughout the following calendar year. Data availability ranges from 5 – 12 months past the end of the desired calendar year. For example, data from the 2005 calendar year is currently projected to be available for purchase from approximately half of the states by June 2006, from one-quarter of the states by September 2006, and from the remaining quarter of the states by December 2006.

C.7.8. Explore Additional Data Types from Existing HCUP State Partners

HCUP long term planning includes a continued effort to increase the number of ambulatory surgery and emergency department databases in the project. Other types of data may become available from Partners as well, e.g., physician-level office data, other types of ambulatory care claims and encounter data, or nurse staffing databases. The Contractor shall explore additional data types from existing HCUP State Partners at the direction of the HCUP Project Officer. This process is similar to the steps involved in identifying new states to target for project recruitment; however, at times additional effort is required to complete data requests.

- Identify suitable data sources
- Educate Partners about AHRQ's interest in the data and intended use
- Explore Partners' willingness to share the data with AHRQ

• Execute an MOA amendment that specifies the data elements the Partner will provide.

Recruiting new data types from existing HCUP State Partners typically proceeds more quickly than recruiting new Partners because HCUP has already established a relationship with the Partner. In addition, the Partner is familiar with the project's requirements and benefits.

C.8. PROCESSING AND CREATING STATE DATABASES

C.8.1. Objectives

One key component of HCUP is processing, and creating uniformly formatted state inpatient and outpatient encounter-level data files. The hospital, ambulatory surgery and emergency department discharge records contained in these files are originally collected by state governments, hospital associations, and private data organizations, as part of a state mandate or as a voluntary data initiative. The data are often derived from billing records; thus, they are often submitted in formats consistent with the Uniform Bill-92 (UB-92) and occasionally with the Centers for Medicare and Medicaid Services Form 1500 (CMS-1500) (although many of the statewide data organization deviate from these national standards in coding and data content). HCUP purchases inpatient data files from all 38 statewide data organizations (HCUP Partners). HCUP purchases outpatient data files from a total of 23 data organizations, including files containing only ambulatory surgery visits, files containing only emergency department visits, and files containing all outpatient data collected by the state data organization. The Contractor is responsible for purchasing all data and software on behalf of AHRQ and completing any forms or agreements to complete the purchases.

Once the data files are purchased from the state, the Contractor must process the data and create three uniformly formatted databases: State Inpatient Databases (SID), State Ambulatory Surgery Databases (SASD), and State Emergency Department Databases (SEDD). Description of these databases is available on http://www.hcup-us.ahrq.gov/databases.jsp. The design and processing of state databases is expected to follow a number of objectives outlined below.

1) Give equal weight to process and release inpatient and outpatient data

It is expected that equal weight should be given to the creation and release of inpatient and outpatient databases. If both the inpatient and outpatient data files arrive within a two-week interval, they should be processed simultaneously to allow for detection of potential issues that may affect both data files and for timely release of the data to users. Otherwise, to ensure timeliness of creating the Nationwide Inpatient Sample (NIS), the inpatient data file should be processed rather than waiting for the outpatient data file to arrive. This constitutes a shift in HCUP priorities. Historically, the SID constitute the backbone of HCUP. Over time the project has experienced significant growth in outpatient data as more states start collecting data on ambulatory surgeries and emergency room visits. Among the 38 HCUP State Partners that contributed to the 2003 data, 21 provided both inpatient and outpatient data. Only four of these states did not submit their outpatient data files at the same time as with the inpatient data files and the time lag varied from two to five months.

2) Finish processing state data files within one month from receipt of the data

After receiving the state data file from a HCUP Partner, the Contractor should thoroughly examine the data in comparison with the source documentation and summary statistics

provided by the state. If no errors are found that would warrant a replacement file, it is anticipated that completion of data processing will not exceed one month after receipt of the data. If a replacement file is needed, the one month timeframe starts with arrival of the replacement file.

3) Be mindful of the creation of derivative databases

State databases form the basis of all derivative databases. Currently, HCUP has two derivative databases including the NIS and the KID. In the future, other derivative databases may exist for inpatient and/or outpatient data. The Contractor is expected to ensure timeliness of the state databases while being mindful of the deliverable dates for the derivative databases, particularly the NIS which is released in June of every year (see Section C.9 and C.10 for the NIS and KID).

The following Table 3 shows the number of states and total databases arriving by month, based on 2003 data. The arrival dates are likely to change from year to year. For each year, the Contractor should develop a schedule with projected arrival dates based on information from the State Partners. Please also note that the outpatient data include ambulatory surgery and emergency department which may be provided in a single, combined file or two separate files.

Table 3							
NUMBER OF STATES AND DATABASES BY MONTH							
Month	# of States submitting data	# of Databa	# of Databases				
		Inpatient	Outpatient	Total			
May	2	2	1	3			
June	3	3	1	4			
July	4	4	2	6			
August	6	6	6	12			
September	8	8	11	19			
October	3	3	1	4			
November	1	1	2	3			
December	6	6	1	7			
January	1	1	0	1			
February	3	1	5	6			
March	3	3	1	4			
April	2	0	4	4			

4) Accommodate different file structures

The state inpatient and outpatient data files may have different structures. Additionally, certain data elements such as detailed charges may be provided in a separate normalized file with multiple records per discharge. The processing program to process data into a common format and produce the HCUP version should be designed to accommodate these different file structures to allow for retaining as much as possible the original information while converting the data to user-friendly and uniform format.

5) Ensure uniformity in the coding of variables across states

Some data elements are coded differently across states. Over the years, HCUP has developed its uniform coding for those variables commonly reported in discharge abstract. The Contractor shall be provided with a copy of the existing software used to process individual state data into the HCUP uniform format and the HCUP processing codebook. No major changes in HCUP uniform format are required in Year 1 and annual updates are anticipated starting Year 2. Possible changes in HCUP uniform coding may be made in response to developments and/or requirements at the state and Federal level, such as changes in the UB (Uniform Bill). The Contractor is expected to consult with the Project Officer to determine if any changes are desirable to the current uniform format and approach to creating it.

6) Create data files with up-to-date and relevant data elements

The Contractor is expected to be aware of changes in source data files submitted by the states by reviewing data dictionaries yearly and process all relevant data provided by the state and in accordance with the MOA. The Contractor should maintain processing programs that are flexible enough to integrate changes requested by the Project Officer, such as but not limited to the addition of clinical data elements, and information on line-item detail.

7) Consult with the Project Officer at various points in the data processing stream

The Contractor is expected to inform and consult with the Project Officer at various points in the data processing stream. At a minimum, the Contractor shall provide the data processing schedule for each state, the findings from an initial look at the state data, the proposed approach for mapping state codes into HCUP uniform coding for each data element, the quality of the data during processing, and summary statistics after processing is complete. The Contractor should expect input from the Project Officer that may affect the final processing of the data, and demonstrate flexibility in requested changes to the processor.

8) Adhere to data confidentiality and security agreements

During data processing, the Contractor must adhere to all data confidentiality and security agreements covering the states' data as specified in the MOA for the state. For example, personal identifier must be encrypted or re-identified by the data source before the data are shipped to the Contractor. Sensitive data elements such as dates, patient and physician identifiers, and patient ZIP Codes should be put into a separate file (Data Development file) once the state data have been re-coded into the HCUP uniform format.

9) Aim to provide feedback to states on quality of data

It is anticipated that the final outputs of data processing include not just individual state databases but also informational products such as summary statistics and data quality reports for sharing with the states (see section C.8.6.1). These information products should be generated as a by-product of the processing stream rather than through a separate resource-intensive effort.

10) Build in quality assurance

Quality assurance should be built into the processing stream to ensure creation of accurate databases and reduce the likelihood of reprocessing. This may involve, but not be limited to, a) proactive communications with the Partners to attain timely information on any changes in data restrictions (e.g., information masked for certain type of cases, particular hospitals not participating in the HCUP), coding and format of existing data elements, and addition or deletion of any data elements; b) effective communication of the information to the processing team; c) thorough examination of the data for any discrepancies with the source file provided by the state and MOA, any anomalies (e.g., out-of-range values, invalid coding, missing values), and any unexpected changes from previous years; and d) design of robust, and also efficient progressing programs. The quality assurance should be designed to address a variety of issues, occurring in the past, present, and future, that may comprise the quality of data processing.

Additionally, as users explore the HCUP databases, potential problems in data processing may be uncovered, although this rarely is expected to occur. It is expected that the Contractor shall fully investigate these potential problems, report back to the Project Officer, and rectify the problems if necessary, as directed by the Project Officer.

11) Perform annual updates to the processing program

Annual updates to the processing program should be performed to keep up with changes in clinical coding such as ICD-9-CM, CPT/HCPCS, DRG, CCS, and other groupers. It is anticipated that no more than 15 significant changes in data elements will occur each year (e.g. changes in coding and additions of new data elements including clinical data elements). The Contractor should be prepared for the implementation of ICD-10 when it replaces ICD-9-CM, the implementation of the UB-04 (Uniform Bill 2004) when it replaces the UB-92 and the implementation of the National Provider ID. The Contractor should be knowledgeable about changes in the CMS-1500. In addition, the Contractor should write processing programs that can be flexible enough to integrate the changes described previously without creating undue burden on resources.

Annual updates should also aim to improve the processing program so that data are processed more efficiently and accurately. The Contractor is expected to keep abreast of any technological innovations that could make data processing more efficient and improve the quality of the products. Recommendations for incorporating such innovations should be addressed in the annual updates.

12) <u>Maintain the HCUP data file structure and provide advice on improved efficiencies in overall processing</u>

The Contractor should assume that the current structure of the HCUP data files including the name of data elements will remain as status quo in order to maintain uniformity across years. The Contractor should advise the Project Officer of alternative ways to improve overall processing of the data.

13) Coordinate data processing with other aspects of project

State data processing is an integral part of the project and must be coordinated with other aspects of the project, such as recruitment of states, signing of the MOAs, distribution of the

data through the Central Distributor, creation of derivative databases, development of the HCUP statistics for the National Healthcare Quality and Disparities Reports. The Contractor should establish formal mechanisms to establish this coordination.

The Contractor shall provide a draft and final proposal for design of the new processing program. The new processing program should be tested and implemented in a timely fashion to allow for use starting with 2006 data. The Contractor shall also provide memo detailing annual updates to the processing program each year.

C.8.2. Review of State Source Data

When data are received from Partner organizations the Contractor shall log relevant information about the file and review file content. Initial review of source files is an important and detailed task. The Contractor should run an initial check of the state data to detect any problems reading the files; compare the data elements with those approved in the MOA, to check for consistency with the source documentation and summary statistics provided by the state, and to align the state data fields with the data fields assigned by the processor. Key data elements should be examined for field length, coding validity, consistency with prior years and level of missing data. This includes an exploration of essential information about the data and its documentation, including but not limited to which hospitals reported data, whether data from special units were included, whether diagnoses and procedures are masked because of sensitive conditions, and how patient and physician identifiers are coded.

The Contractor will be provided a list of edit checks performed by HCUP. The results of the initial run should be reported to the Project Officer in a memo, including those items listed below. Any discrepancies relevant to the state source data should be clarified with the state data organization, in coordination with the recruitment and purchasing activities. In some cases, the Contractor may need to ask the Partner to re-submit the data files entirely. Any discrepancies relevant to processing uniform data should be clarified with the Project Officer.

C.8.2.1. Check that the Data to be Processed is Consistent with the MOA

The Contractor should be sure that the processing program will process all data consistent with the MOA. For example, records from hospitals that are excluded on the MOA should not be processed. Data elements not on the MOA should not be processed, regardless of whether the state data organization provided the data element. All data elements on the MOA should be processed, regardless of format. Discrepancies between the MOA and processing programs should be addressed initially during MOA negotiations, and in consultation with the data source and Project Officer.

Each state has specific restrictions on processing and use of their data. For example, the state may require exclusion of particular data elements, hospitals, or records from the HCUP database. Sometimes specific information is to be masked for particular types of patients. The Contractor should find out what the restrictions are for each year's data, apply the restrictions, record in the documentation system. In addition, the recruitment team should document these restrictions and provide them to the processing team with verification that restrictions have been noted and applied.

C.8.2.2. Check that the Coding of the Source Data is Consistent with the Documented Source Coding and the Processing Program

The Contractor should be sure that the processing program will read in the correct values for each data element provided by the state and agreed to in the MOA.

C.8.2.3. Check Validity and Consistency of Diagnoses and Procedures

Check ICD-9-CM diagnoses and ICD-9-CM and CPT/HCPCS procedures codes on the records for validity compared to a valid list of ICD-9-CM and CPT/HCPCS codes for the same time period. Check that ICD-9-CM and CPT/HCPCS codes on record are consistent with gender recorded on the discharge compared to valid gender-specific ICD-9-CM and CPT/HCPCS codes for that period.

C.8.2.4. Exploratory Statistics to Check the Consistency in Coding with Previous Years

The Contractor should compare the data fields from previous years to the current year. The Contractor should examine the frequency or descriptive statistics of key data elements, including valid values, undocumented values, and missing. Any obvious discrepancies should be checked with the data source.

C.8.2.5. Other Checks and Documentation

At any time, the Project Officer may request a report of additional edit checks of the data prior to processing. The Contractor is expected to maintain a document of edit checks performed prior to processing of the state source data.

For each state, the Contractor should provide a memo detailing results of initial check of the source data and providing recommendations on how individual data elements should be mapped to HCUP uniform coding or retained as unique, non-standardized variables.

C.8.3. Create Uniform State Data Elements for State Databases

The SID, SASD, and SEDD should contain uniform data elements. Convert state-specific files into a uniform a HCUP format as directed below. All necessary software is purchased by the Contractor for use by AHRQ and in HCUP. Complete any necessary negotiations or agreements with the software vendor.

C.8.3.1. Apply Quality Control Edits

Apply HCUP edits to the data. The Contractor will be provided with the current HCUP quality control that lists detailed edits for individual variables. The Contractor is expected to thoroughly review the quality control measures and, in preparation for processing the 2006 data year, make recommendations for changes, additions or deletions to improve the quality edits checks to the Project Officer. Once reviewed and finalized, it is expected that these quality edit checks will be incorporated into the processing program. The Contractor shall review and update the list yearly for the remainder of the contract, in consultation with the Project Officer.

C.8.3.2. Create Urban-Rural Patient Location Data Elements

The Contractor shall create several data elements for urban-rural location of the patient residence based on different publicly available categorization schemes (e.g., Urban Influence Codes, Rural Urban Continuum Codes, Rural Urban Commuting Areas, Core-based Statistical Areas). Because most of these categorization schemes use the county as the basis of the

categorization, the Contractor shall need to translate ZIP Code of patient residence into county when the county of patient residence is not supplied by the state. The translation of ZIP Code to county will be updated each year using the most appropriate translation for the data year.

C.8.3.3. Add Data Elements as Directed

The Contractor should expect that no more than 10 additional data elements will be added to the processing of data each year. The Project Officer will provide guidance on whether these data elements should be added to all databases or to a subset of databases.

C.8.3.4. Apply Clinical Classification Software (CCS)

Apply the most current version of the CCS provided by the Project Officer to the discharge data in order to group diagnoses and procedures into CCS categories (one CCS code per diagnosis and one CCS code per procedure). At the moment, the CCS is to be applied to both the inpatient and outpatient data. At some point in the future, the Contractor may be asked to apply a different version of the CCS to the outpatient data. For example, different versions of the CCS may include but are not limited to an ICD-9-CM diagnostic grouper appropriate to emergency department settings, an ICD-9-CM diagnostic grouper appropriate to ambulatory surgery settings, and/or a CPT/HCPCS procedure grouper appropriate to emergency department settings.

C.8.3.5. Apply the Diagnosis Related Groups (DRG) Grouper Software

Apply time period specific DRG Grouper software to the discharge data to generate DRG and Major Diagnostic Category (MDC) to assign DRG codes. Apply DRG version 18 for 2005 data. From 2005 onward (overlapping with DRG 18 in 2005), apply DRG version 22, in addition to the DRG in effect on the discharge date.

C.8.3.6. Apply the Latest Versions of Severity Adjustment Software to the Inpatient Data

Apply the most current versions of Medstat's Disease Staging software, 3M's APR-DRG software, HSS's APS-DRG software, and AHRQ's comorbidity software.

C.8.3.7. Apply Place of Service Flag to the Outpatient Data Files

Apply ambulatory surgery (AS), emergency department (ED) and observation stay (OS) service flags to the outpatient data files. The algorithms to create the flags are defined in the processor, and are based on UB-92 data elements supplied in the source data, including bill type (UB-92 form locator 4), revenue center codes (UB-92 form locator 42), a defined list of ICD-9-CM procedure codes or CMS' annual update of acceptable CPT/HCPCS ambulatory surgery procedure codes, and service specific charges. Because some outpatient records are recorded on the CMS-1500 and source data may include other relevant data elements in the future, the Contractor is expected to review this algorithm for completeness and accuracy in Year 2 and Year 4.

C.8.3.8. Median Income of ZIP Code to Data Development Files

Obtain ZIP code data from an external vendor (HCUP currently uses Claritas Inc. for ZIP-code level data and previously used CACI Marketing Systems). Add median household income to the state databases by linking to the patient ZIP code. Create income categories by quartiles

based on all ZIP codes in the U.S. The original income variables will be placed in the Data Development File while the income categories will go to the Core File of the state databases and the NIS and KID.

C.8.4. Create State Files

The SID, SASD, and SEDD should consist of Core, Charge, and Data Development Files for each state. The Data Development File contains sensitive variables such as dates, patient and physician identifiers, and patient ZIP Codes. Convert state-specific files into a uniform HCUP format and create a SID, SASD, and SEDD for each state that contributes data to HCUP. Requirements, including deliverables, specific to the processing of inpatient and outpatient data are described below. All files shall be created in SAS format. The estimate of the number of state files is shown in Table 4.

C.8.4.1. Create State Inpatient Databases (SID) Files

The SID should consist of Core, Charge, and Data Development files for each state. For the 2005 data year, HCUP is expecting to create up to 40 SIDs. The Contractor should expect that only a small number of new SIDs (less than 10) will be added throughout the contract period.

C.8.4.2. Create State Ambulatory Surgery Databases (SASD) Files

The SASD should consist of Core, Charge and Data Development files for each state. For the 2005 data year, HCUP is expecting to create 25 SASDs. The Contractor should assume that at least two SASD will be added each year, although be flexible in the substitution of a SEDD for a SASD. Currently, charge files for the SASD are of three types (i.e., line item detail, charge arrays, bundled charges), depending on the way in which the state source data is submitted. For the time being, charge files will be maintained in this manner. The Contractor should consider alternative ways to make these charge files more uniform beginning in Year 2.

Records that have been flagged by the state source file as outpatient (but not ED) or flagged by the HCUP processor (HCUP AS service flag > 0) should be placed in the SASD. The Contractor should be aware that some records are flagged as both AS and ED either by the state and/or the HCUP processor; thus, the records will be in both the SASD and the SEDD.

C.8.4.3. Create State Emergency Department Databases (SEDD) Files

The SEDD should consist of Core, Charge and Data Development files for each state. For the 2005 data year, HCUP is expecting to create a total of 23 SEDDs. The Contractor should assume that at least 2 SEDD will be added each year, although be flexible in the substitution of a SASD for a SEDD. Currently, charge files for the SEDD are of three types (i.e., line item detail, charge arrays, bundled charges), depending on the way in which the state source data is submitted. For the time being, charge files will be maintained in this manner. The Contractor should consider alternative ways to make the SEDD charge files more uniform beginning in Year 2.

Records that have been flagged by the state source file as ED or flagged by the HCUP processor (HCUP ED service flag > 0 or HCUP OS service > 0) should be placed in the SEDD. The Contractor should be aware that some records are flagged as both AS and ED either by the state and/or the HCUP processor; thus, the records will be in both the SASD and the SEDD.

C.8.4.4. Extract Rotavirus Data

The Contractor shall provide data for an ongoing, approved, collaborative project between HCUP/AHRQ and the National Institute of Allergy and Infectious Diseases (NIAID/National Institutes of Health.) These data will be used in more detailed studies to determine whether rotavirus vaccine should be disseminated in developing countries. For all data years of the SID files, the Contractor should integrate this data extraction into the data processing stream. The Contractor shall extract data for all children 4 years and younger with specified conditions, and merge the data set for all states in that data year, but maintain a state indicator. Detailed specifications which include list of variables to be extracted and created will be provided to the Contractor.

For each data year, the Contractor should schedule two deliveries of the Rotavirus files by state – the first when half of the states are processed, and the second with the remaining states. All files shall be created in SAS format. The files will be documented with a PROC CONTENTS from SAS.

C.8.4.5. Document Errors in Data Processing

The Contractor is expected to keep a log of errors requiring the re-processing of data. The log should include the name of the file, the type of error, where the error originated and the way it was detected, corrective measures taken to re-process the data, action steps taken to ensure this type of error does not re-occur, resources used to correct the error, and the dates of original processing/delivery, error detection and re-processing/delivery. The log should also include the time and cost that it took to correct the error. The Contractor is expected to submit this log annually to the Project Officer.

C.8.4.6. Create HCUP Central Distributor Files

State Partners maintain the rights to their respective SID, SASD, and/or SEDD files created from the original data provided to HCUP. To help State Partners facilitate expedited access to the SID, SASD, and SEDD, AHRQ creates HCUP Central Distributor (also known as "restricted access public release") versions of these files as specified in the MOAs or MOA amendments (see section C.7.4.2). In general, these databases are subsets of the corresponding SID, SASD, and/or SEDD files produced for AHRQ plus variables that allow linkages to the AHA Annual Survey and to community variables. The "restricted access public release" databases are disseminated through the HCUP Central Distributor (see section C.15). Not all State Partners participate in this aspect of the project.

The Contractor shall create HCUP Central Distributor versions of the SID, SASD, and SEDD as specified by Partners in signed MOAs and/or MOA Amendments. This should entail the elimination or customization of data elements contained in the SID, SASD, and SEDD files prepared for AHRQ. Prepare individual files on CD-ROMs in ASCII format for each participating state. In future years other formats and/or media may be considered. Files will contain SAS and/or other such programs for converting files into different formats. A set of "master" CD-ROMs (or other media) for each state stored in the contractor's offices, a set of "master" CD-ROMs to AHRQ, a set of backup CD-ROMs stored offsite, and a set of "master" CD-ROMs to the HCUP Central Distributor (if housed separately) will be produced within two weeks of receipt of the signed MOA, or within two weeks after the respective SID, SASD, and SEDD files are prepared for AHRQ, whichever occurs later. The CD-ROMs will be organized by state and by year and will include data elements as specified in the signed agreements with the states.

HCUP Central Distributor files should be completed and available for purchase within three weeks of creating the SID state-specific file for AHRQ.

The number of HCUP Central Distributor versions of the SID, SASD, and SEDD data files over the contract period is estimated below. These estimates include the creation of previous years of data for new or current Partners participating in the HCUP Central Distributor.

Table 4 ESTIMATE OF NUMBER OF CENTRAL DISTRIBUTOR FILES					
DATA YEAR	# of SID	# of SASD	# of SEDD		
2005	30	18	15		
2006	31	19	17		
2007	32	20	18		
2008	33	22	20		
2009	33	24	21		

C.8.4.7. Customize Files

Periodically, AHRQ may assist outside researchers to obtain additional or customized data elements that are not included in the standard HCUP Central Distributor files. While AHRQ staff will work with HCUP Partners to obtain permission for these special requests, the Contractor shall prepare the files as instructed by AHRQ. This work may involve, but is not limited, to the following: (1) creating data files that link existing HCUP data elements to HCUP Central Distributor files, (2) creating new data elements based on existing HCUP data elements, including them in a file that links to the HCUP Central Distributor files, (3) aggregating observations based on existing HCUP data elements. The Contractor should have the capacity to create these files, copy them onto a CD-ROM, and provide them to the HCUP Central Distributor for final dissemination. Approximately 5 such requests involving 15 different HCUP databases per year can be assumed.

C.8.5. Documentation for SID/SASD/SEDD

Documentation should be created and updated in tandem with the creation of the data files. Documentation should include descriptions of uniform HCUP formatting, retained unique data elements, passwords, file locations, variable attributes and descriptive statistics. The documentation should contain general information about the file composition (information about the data source, the types of hospitals included and excluded records), variables, data processing programs, labels for variables and values, and re-codes. Ensure that all documentation appears in the electronic documentation system (www.hcup-us.ahrq.gov).

In addition, the Contractor shall prepare the documentation for the HCUP Central Distributor versions of the SID, SASD, and SEDD. Currently, for each of these database types, there is a single set of documentation that describes the contents of the respective databases for all State Partners (and all years of data) participating in the HCUP Central Distributor. These sets of documentation are updated with each new release of the corresponding databases. See http:///

existing SID, SASD, and SEDD documentation contents, e.g., the <u>SID documentation</u> on the HCUP-US Web site. Documentation should be created when a significant number of databases are ready to be released through the Central Distributor. A "master" copy of the documentation on CD-ROMs should be made available to the HCUP Central Distributor and AHRQ. In addition, the documentation should also be posted on the HCUP-US website.

In addition to the database documentation described above, approximately 25 pages of written materials are included as general introductory information in each "database binder". Each database binder includes approximately 25 pages of introductory text in hard copy format, documentation on CD-ROMs as described in the previous paragraph and the respective data files. Currently, there are five database binders (i.e., NIS, KID, SID, SASD, and SEDD). With each database release, these 25 pages of general information may require modest updates. No more than 5 releases per year are expected.

C.8.6. Copy and Deliver Data and Programs

C.8.6.1. Copy and provide SID/SASD/SEDD Files for Return to States

Make a copy of AHRQ's version of the HCUP formatted SID/SASD/SEDD files. Return the SID/SASD/SEDD files and documentation for each state to the corresponding HCUP Partner without charge to the Partner (each Partner gets a copy of their state's data, but not other states' data). The data files may be in SAS or ASCII format depending on the Partner's request. Once the AHA crosswalk (see section C.13.1.3) has been completed, a copy of the crosswalk file is sent to each state including only their state's hospitals. Complimentary copies of derivative databases such as the NIS and the KID will also be provided to those states that request the data and complete the Data User Agreement (DUA) for each database.

Provide each state with a report of their data quality in comparison to averages across all the states or directly to other states with other state names masked. The report should be generated as a by-product of data processing. Aspects of the data examined in the report should include type of hospitals and discharges included or excluded in the database, completeness of the data in terms of the extent of missing data, and errors in the data identified through automated edit checks involving out-of-range or invalid values and inconsistency between data elements. For those states that submit inpatient and outpatient databases, the data quality report should cover not just the SID file but also the SASD/SEDD files. The presentation shall consist mainly of tables with minimum text. To develop the report, the contractor shall start in the first year of the contract with a prototype using a small sample of states as examples. After sharing with the Partners to get feedback, a report for each state will become part of the deliverables for year 2 and onward and will be updated automatically. The report can be posted on the Partners' page of the HCUP-US Web site allowing each individual state to view its own report only.

C.8.6.2. Copy Intramural Data for Delivery for AHRQ

All data is currently delivered to the Project Officer on password-protected CD-ROMs. Given the increasing volume of data, the Contractor shall explore alternative delivery mediums that are efficient and secure while taking into consideration that each state's data file is to be delivered as a distinct product and not combined with other states. The Contractor shall deliver a memo that details alternate methods of delivery and storage. The memo will include a cost comparison, a security comparison, and convenience of accessing data comparison to current operations.

C.8.6.3. Copy of Data Processing Programs

Provide the Project Officer with copies of programs that create the SID/SASD/SEDD and other databases by posting them on the password-protected section of the electronic documentation system (www.hcup-us.ahrq.gov).

C.8.6.4. Copy of Summary Statistics

The Contractor is expected to post the results of summary statistics for each data file on www.hcup-us.ahrq.gov. The summary statistics should be generated as a by-product of data processing, and include basic descriptives (e.g., mean, minimum, maximum, standard deviation, and percent of cases with missing values) and frequencies, as well as results of the quality edit checks (e.g., percents of cases with different types of invalid values).

C.8.7. Create Physician Files

Obtain, examine, process, create, and document Physician Files from those Partners that provide physician-level data files. Physician files contain a record for each physician identifier with information on the physician such as specialty. There are currently four states that provide Physician Files. The file is linkable to the SID, SEDD and SASD to augment those files with additional information on the physicians. The HCUP Physician Files are considered Data Development files intended for highly restricted use. These Physician Files are never released outside of AHRQ and may only be used by AHRQ researchers with approval from the Project Officer.

It is anticipated that the National Provider Identifier will be in place and incorporated into statewide encounter data by year four of the contract. It may then be possible to obtain a data file with physician information, such as is currently maintained by the centers for Medicaid and Medicare for the Uniform Provider Identifier Number (UPIN). The Contractor should plan to incorporate such a file into HCUP.

C.8.8. Evaluate the Collection, Processing, Documentation and Delivery Methods for State Databases

Task C.8.8 is an Option.

Under sections C.19.2 and C19.3 the Contractor will be monitoring general technological advances and advances specific to health information technology that may be of relevance to HCUP. Using the information gathered from those tasks, as well as input from HCUP Partner organizations and other experts, in year 3 of the contract the Contractor shall evaluate whether there have been major changes in technology that might warrant a major over-haul of the approach used for collecting, processing, documenting or delivering the state databases. Examples of major over-hauls stemming from technological advances include such things as electronic exchange of data from Partners on a more frequent basis (e.g. streaming data as opposed to a one-time annual submission), or format changes to databases based on major changes in data standards or the availability of new types of data from the electronic healthcare record.

The report of this evaluation shall describe major technological advances that have been identified; how these advances might improve HCUP state databases collection, processing,

documentation or delivery; readiness of HCUP Partners to adopt or take advantage of the technological advances; a general description of the HCUP over-haul that would be needed to take advantage of the technological advances; advantages and disadvantages of making the over-haul; and a rough estimate of timeline and costs (and potential cost savings) for implementing the over-haul.

C.9. NATIONWIDE INPATIENT SAMPLE (NIS)

Overview

The Nationwide Inpatient Sample (NIS) contains all-payer data on hospital inpatient stays from states participating in HCUP. Each year of the NIS provides information on approximately 5 million to 8 million inpatient stays from about 1,000 hospitals. Summary records for all discharges from sampled hospitals are included in the NIS database.

The NIS contains patient-level clinical and resource use information included in a typical discharge abstract. The NIS can be linked directly to hospital-level data from the AHA Annual Survey of Hospitals and to county-level data from Bureau of Health Professions' ARF, except in those states that do not allow the release of hospital identifiers.

The NIS is designed to approximate a 20-percent sample of U.S. community hospitals, defined by the AHA to be "all nonfederal, short-term, general, and other specialty hospitals, excluding hospital units of institutions." Included among community hospitals are specialty hospitals such as obstetrics-gynecology, ear-nose-throat, short-term rehabilitation, orthopedic, and pediatric institutions. Also included are public hospitals and academic medical centers. Excluded are short-term rehabilitation hospitals (beginning with 1998 data), long-term hospitals, psychiatric hospitals, and alcoholism/chemical dependency treatment facilities.

This universe of U.S. community hospitals is divided into strata using five hospital characteristics: ownership/control, bed size, teaching status, urban/rural location, and U.S. region. The NIS is a stratified probability sample of hospitals in the frame, with sampling probabilities proportional to the number of U.S. community hospitals in each stratum. The frame is limited by the availability of inpatient data from the data sources in the SID.

Weights and other variables are included with the NIS to create national estimates. Most states allow specific hospital identifiers to be included in the NIS, though a number of states do not disclosure of hospital identities.

Important Documents for the NIS

Introduction to the HCUP Nationwide Inpatient Sample (NIS), 2003 http://www.hcup-us.ahrq.gov/db/nation/nis/NIS Introduction 2003 v7.pdf

Design of the HCUP Nationwide Inpatient Sample, 2003 http://www.hcup-us.ahrq.gov/db/nation/nis/reports/NIS 2003 Design Report.pdf

Calculating Nationwide Inpatient Sample Variances http://www.hcup-us.ahrq.gov/reports/CalculatingNISVariances200106092005.pdf 2002 HCUP Nationwide Inpatient Sample (NIS) Comparison Report http://www.hcup-us.ahrq.gov/reports/2005 03 del%20379.pdf

NIS Data Sources and Restrictions http://www.hcup-us.ahrq.gov/db/nation/nis/NIS Sources and Restrictions 2003.pdf

C.9.1. Create the NIS

The creation of the NIS is outlined in the document, NIS Processing Logistics. The following section outlines these steps. It is expected that the NIS will be released no later than June of each year. For example, the 2005 NIS will be released no later than June 2007. The following Table 5 provides information on timing of the NIS and KID (described in the next section):

Table 5 NATIONWIDE INPATIENT SAMPLE AND KID'S INPATIENT DATABASE TIMING					
Contract year	Contract year begins	Contract year ends	Year of NIS	Year of KID	Data release expected
1	Sep 2006	Sep 2007	2005	_	June 2007
2	Sep 2007	Sep 2008	2006	2006	June 2008
3	Sep 2008	Sep 2009	2007	_	June 2009
4	Sep 2009	Sep 2010	2008	_	June 2010
5	Sep 2010	Sep 2011	2009	2009	June 2011

C.9.1.1. Select the NIS Sample

- Identify the universe of AHA short-term acute care (community), non-rehabilitation hospitals.
- Identify the sampling frame of AHA community, non-rehabilitation hospitals in the SID.
- Apply state-specific restrictions to the sampling frame, as outlined in NIS Data Sources and Restrictions.

Many states impose restrictions such as limitation on the number of discharges or number of hospitals that can be included in the NIS, or exclusions on specific hospitals by name, or exclusions of hospitals that could be indirectly identified (for those states that do not allow disclosure of hospital identity).

C.9.1.2. Create the Hospital Weights File

- Create the hospital weights SAS file containing hospital and discharge weights calculated using data from the AHA Annual Survey of Hospitals and SID discharge counts adjusted for missing quarters of data.
- Sort the file by HCUP hospital identifier (HOSPID) and YEAR and include strata, weights, and two versions of the AHA hospital identifier variables.
- C.9.1.3. Create Deliverable NIS Core and Severity Adjustment Files and Produce Verification of Restrictions Memo.

- Merge all the SID files with the NIS Hospital File, keeping records for sampled hospitals to create the NIS core file which includes all SIDs participating in the NIS.
- Assign median income quartile value (ZIPINC QRTL) from patient's ZIP Code (ZIP).
- Apply state-specific restrictions, document that restrictions have been applied in the form of a Verification of Restrictions memo, and receive AHRQ approval before delivering NIS.
- Sort the file by HOSPID and KEY. Keep only Core variables. In previous years a maximum of 15 diagnoses and procedures were kept on the file, but in future years it is likely that the entire vector of diagnoses and procedures will be kept.
- In previous years, two 10% sample files were created; this will be discontinued.
- Create the NIS Severity Adjustment files.

C.9.1.4. Generate Databases to be Delivered for External Release.

Create deliverable files: Hospital weights file, Core file, Severity Adjustment file. Prepare the SAS files for delivery to AHRQ. Create ASCII files for delivery to AHRQ and the Central Distributor.

C.9.1.5. Create the NIS File for use within AHRQ

Create the NIS for use only within AHRQ which includes efficient links to specific SID variables (e.g., sensitive data elements such as dates and patient ZIP Codes, the full range of urban-rural variables). This SAS file will enable AHRQ researchers to use data development variables for the NIS without requiring linkage to multiple SID data development files.

C.9.2. Documentation for NIS

C.9.2.1. Generate Documentation for the NIS

The Contractor shall generate the following documentation for the NIS. Documentation includes but is not limited to:

- SAS, SPSS, and Stata (Stata load programs will begin with the 2005 NIS) load programs
- File specifications (layouts)
- Value labels for CCSs, DRGs, and ICD-9-CM codes (ICD-9-CM labels will begin with the 2005 NIS)
- Update Special Reports
 - Introduction to the NIS
 - HCUP Coding Practices
 - HCUP Quality Control Procedures
 - HCUP Hospital Identifiers
- Adobe Acrobat versions of NIS Core, Severity, and Hospital Weights variable notes (data element descriptions)

Complete NIS documentation is available on the HCUP-US Web site. (Weighted summary statistics are not posted on the Web due to privacy restrictions.) In the future, as directed by the HCUP Project Officer, the NIS documentation may be made available only on the HCUP-US Web site and not in hard copy.

The Contractor shall prepare the NIS package for dissemination including making the documentation available on HCUP-US Web site. The NIS package that will be received by NIS purchasers will consist of the following:

- Introduction to the NIS
- NIS core file (discharge level)
- NIS severity adjustment file (discharge level)
- NIS hospital file (hospital level)
- Weighted summary statistics
- Read_me txt file which outlines how documentation can be obtained. In addition, the NIS CD labels will include precise URLs that define where the documentation can be accessed.

C.9.2.2. Copy of NIS Data Processing Programs

Provide the Project Officer with copies of programs that create the NIS by posting them on the HCUP-US electronic documentation system.

C.9.2.3. Develop the NIS Comparison Report

This report compares estimates from the NIS to other data sources including the National Hospital Discharge Survey, Medicare Part A claims data (MedPAR files) and the annual survey of the AHA. The report will be completed after MedPAR data become available later in the year of NIS data release. Note that much of the report can be updated in anticipation of completing the analysis to facilitate an expedited release of the report.

C.9.3. Other NIS- Related Activities

C.9.3.1. New Data Elements

As new data elements become available on the SID, they will be considered for inclusion in the NIS. Anticipate 3 – 5 new data elements each year, beginning with Year 2 of the contract. New data elements can include data elements constructed from SID files or from external files such as the AHA Annual Survey. Examples of new data elements include:

- nurse staffing ratios
- variables based on detailed charges
- additional ZIP Code-level variables
- variables that describe the demographics of a hospital (such as percent of discharges of Hispanic ethnicity, percent of discharges who are black, percent of discharges covered by Medicare, percent uninsured, percent covered by Medicaid)
- distance traveled to the hospital (or time required to travel to the hospital) based on patient's ZIP Code
- clinical data elements as they become available, such as present on admission
- organizational characteristics beyond the structural variables currently included on the NIS
- linkages to other databases, such as the hospital's Medicare identifier, identifiers to allow linkage to state licensure numbers, and
- encrypted provider identifiers for individual procedures.

C.9.3.2. Evaluate the NIS Sampling and Weighting Strategy

In year 2 of the contract (in time to be implemented for the 2006 NIS), conduct a re-evaluation of the sampling and weighting strategy for the NIS to ensure that the approaches yield the most reliable and valid estimates possible given the sampling frame for the NIS (i.e., the SID). For example, this report should assess the feasibility of creating alternative sets of weights for various purposes, e.g., to allow national estimates on variables that are not available from all states such as race/ethnicity and birth weight, or to allow national estimates using only those states that allow linkage of hospital identifiers to the AHA . The report should describe the past approach, outline suggested changes to the sampling and weighting strategy, outline alternative methodologies, and make recommendations for revising the approach. The document should include a description of the advantages and disadvantages of changing the sampling and weighting strategy, as well as an assessment of costs. "Changes in NIS Sampling and Weighting 1998" is an example of a past report of this type.

C.9.3.3. Add New NIS Data Elements to Old Years of the NIS.

Over the years, new data elements have been added to the NIS or existing data elements were redefined. For example, as PT_UR_CAT4 (the patient's urban-rural code in 4 categories) which was added to the 2003 NIS. As another example, the variable that provides information on the median household income for the patient's ZIP Code was redefined in 2003 from a 4 category variable with dollar values in ranges, to a variable that is defined based on quartiles of the distribution. In year 2 of the contract, prepare a memo that evaluates to what extent these data elements which were added or redefined over time can be created for previous years. In addition, provide a recommendation for how these variables can be made available to researchers outside AHRQ.

C.9.3.4. Evaluate the Processing, Documentation, and Dissemination Procedures

Task C.9.3.4 is an Option.

In the process of developing, documenting, and disseminating the 2005 NIS, evaluate all procedures to identify potential improvements in accuracy and efficiency. A goal of this evaluation is to develop a process that will improve efficiency and make both the NIS and the KID available as early as possible. In year 2 of the contract (in time to be implemented for the 2006 NIS and KID), prepare a report that outlines suggested changes to the NIS and KID production procedures from sampling to dissemination. The report will include:

- a description of the past approach
- descriptions of alternative procedures
- recommendations for revising the processing, documentation, and dissemination stream
- an assessment of the advantages and disadvantages of changing the approach, and
- an assessment of additional costs or cost savings associated with alternative approaches.

In addition, this report will assess the feasibility and advisability of creating an interim NIS for internal use only which will be comprised of states whose data are made available to HCUP early in the processing stream and which will thus include only a subset of HCUP states. The interim NIS would be available earlier than the final NIS to generate interim statistics and

forecasting health care costs and use trends. This interim NIS would not be disseminated publicly, but would only be used to produce reports.

This report will also include consideration of KID processing so that the two databases can be developed simultaneously in those years when the KID is also released.

C.10. KIDS' INPATIENT DATABASE (KID)

Overview

The KID was developed to enable analyses of hospital utilization by children across the United States. The target universe includes pediatric discharges from community, non-rehabilitation hospitals in the United States including children's hospitals. The sampling frame is limited to pediatric discharges from community, non-rehabilitation hospitals for which data were provided by HCUP Partner states, drawn from the SID. Pediatric discharges are defined as all discharges with an age at admission of 20 years or younger.

The KID contains charge information on all patients, regardless of payer, including persons covered by Medicare, Medicaid, private insurance, and the uninsured. The KID's large sample size enables analyses of rare conditions, such as congenital anomalies and uncommon treatments, such as organ transplantation.

Inpatient stay records in the KID include clinical and resource use information typically available from discharge abstracts. Discharge weights are provided for calculating national estimates. The KID can be linked to hospital-level data from the AHA's Annual Survey of Hospitals and county-level data from the ARF, except in those states that do not allow the release of hospital identifiers.

The 2000 KID differs from the 1997 KID release in that more states are included in 2000, some data elements were dropped, some were added, and the values of some data elements were changed. The 2003 KID is similar to the 2000 KID. The KID is created every three years (i.e., 1997, 2000, 2003, 2006, etc.).

Important Documents for the KID include:

Introduction of the HCUP Kids' Inpatient Database (KID), 2003

Design of the HCUP Kids' Inpatient Database (KID), 2003

Calculating Variances

Comparison Report

C.10.1. Create the KID

The creation of the KID follows roughly the same process as the creation of the NIS, with several major exceptions: the KID is restricted to discharges age 20 years or less, the KID is not an annual database (it is created and released every three years), and the KID consist of a sample of discharges from all hospitals in the SID that have any pediatric discharges. The next KID is expected for data year 2006 (year 2 of the contract). The following Table 6 is reproduced from the section on the NIS, and provides information on timing of the NIS and KID:

Table 6 NATIONWIDE INPATIENT SAMPLE AND KID'S INPATIENT DATABASE TIMING					
Contract year	Contract year begins	Contract year ends	Year of NIS	Year of KID	Data release expected
1	Sep 2006	Sep 2007	2005	_	June 2007
2	Sep 2007	Sep 2008	2006	2006	June 2008
3	Sep 2008	Sep 2009	2007	_	June 2009
4	Sep 2009	Sep 2010	2008	_	June 2010
5	Sep 2010	Sep 2011	2009	2009	June 2011

In addition to the processing and documentation steps described for the NIS, create an analytic file based on the KID that is available for intramural use only (by AHRQ researchers), which includes all pediatric discharges from all hospitals in the SID with any pediatric cases (rather than just the sample of discharges which appears in the KID). Similar to the intramural-only NIS file, this database will be constructed to allow easy linkage to key SID data elements, without requiring linkage to all individual SID files.

C.10.2. Other KID-related Activities

C.10.2.1. Assess the Sampling and Weighting Strategy

The KID will undergo an evaluation of its sampling and weighting strategy similar to the evaluation that will be conducted on the NIS. Similarly, the purpose is to ensure that the sampling and weighting approaches yield the most reliable and valid estimates possible given the sampling frame for the KID (i.e., the SID). For example, the KID could be redesigned to include a sample of hospitals rather than all hospitals with any pediatric discharges in the SID. This may be desirable if it will help reduce identifiability of individual institutions and will eliminate the current practice of excluding certain hospitals from the sampling frame from certain states. In year 2 of the contract (in time to be implemented for the 2006 NIS), prepare a report that outlines suggested changes to the sampling and weighting strategy, describes the past approach, outlines alternative methodologies, and makes recommendations for revising the approach. The document should include a description of the advantages and disadvantages of changing the sampling and weighting strategy, as well as an assessment of costs.

C.10.2.2. Assess the Processing, Documentation, and Dissemination Procedures

This evaluation is described above under the NIS. This same report will include evaluation of KID processes and will outline the strategy to be used to create the KID and NIS simultaneously so they can both be released in June 2006.

C.11. MULTI-STATE AND NATIONWIDE OUTPATIENT DATABASES

Task C.11 - C.11.9 is an Option.

HCUP does not currently create any nationwide outpatient databases. A feasibility study, conducted in 2001, evaluated the creation of nationwide sample of ambulatory surgery stays. The study determined that the limited geographical distribution of the statewide data organizations that provided 1999 ambulatory surgery data to HCUP combined with the lack of complete information from all free-standing ambulatory surgery centers in a state did not warrant the creation of a nationwide sample of ambulatory surgery stays at this time. Similarly, the geographical distribution of HCUP Partners that provide emergency department data has been limited, and thus has not warranted the creation of a nationwide sample of emergency department visits. During the course of the project, however, we expect that the geographic distribution of these databases will increase, making the creation of at least one nationwide outpatient database plausible, which would enable the creation of national and regional estimates. During Year 2 of the contract, conduct an analysis that will assess the feasibility and advisability of creating a Nationwide Emergency Department Database (NEDD). Depending on the results of the analysis, the Contractor shall repeat the analysis in Year 3 or proceed with the creation of the NEDD in Year 3, and then yearly thereafter. During Year 4 of the contract, conduct an analysis that will assess the feasibility and advisability of creating a Nationwide Hospital-Based Ambulatory Surgery Database (NHASD). Some or all of the following process will be required for creating this nationwide outpatient database (NEDD or NHASD).

C.11.1. Creation of Multi-State Data File

In preparation for the NEDD and the NHASD and to ease intramural analyses, the Contractor shall create a multi-state version of emergency department visits and ambulatory surgery visits annually. These two files will be available for intramural use only (by AHRQ researchers). The multi-state emergency department data file will include all discharge abstracts from all SEDD and discharge abstracts from the corresponding SID that have a record of an ED visit (e.g., admission source, revenue code, detail charge) in a given data year. Flags will be placed on the file to indicate how the record was identified for inclusion. The multi-state ambulatory surgery data file will include all records from all SASD in a given data year. Minimal documentation is expected to accompany these data files.

C.11.2. Comparison Report

Annually, the Contractor shall compare estimates from the multi-state SEDD and SASD files to other data sources including, but not limited to, the National Ambulatory Medical Care Survey, National Health Interview Survey, AHA Annual Survey, Versant Freestanding Ambulatory Surgery Center Data. Comparisons should be made to each individual SEDD and SASD (noting which files are included in the Central Distributor) as well as to the multi-state files. The report should include text that describes the methodology of the other data sources. The Contractor should use the report, "Evaluation of the State Ambulatory Surgery Databases Available through the HCUP Central Distributor 2002" as a model. The report shall be completed within 3 weeks after delivery of the multi-state data files.

C.11.3. Develop the Concept of a Nationwide Outpatient Database (NEDD, NHASD), Create a Test Database

Prepare and deliver an interim report that describes sampling and weighting options (for a database that would be used for national and regional estimates) and that outlines design options for the desired database (e.g., NEDD, NHASD). In the case of the NEDD, consideration should be given to the variability in the meaning of data elements collected in the SEDD and the SID (e.g., principal diagnosis for admission versus primary diagnosis in the emergency department). In the case of the NHASD, consideration should be given to ambulatory surgeries in free-standing centers in order to make a decision about whether the nationwide database should be limited to hospital-based surgeries. This report should include an evaluation of the feasibility of developing a NEDD or a NHASD, including considerations about the variability in the meaning of data elements across databases (e.g., principal diagnosis for admission as recorded in the SID versus primary diagnosis in the emergency department as recorded in the SEDD) and variation across states in the types of procedures (i.e., for NHASD). The report should also include recommendations about which sampling/weighting options would provide the most reliable estimates and additional data elements that may be useful for the HCUP data end-user. The Project Officer will review this report and make a final determination about the sampling strategy to be followed by the contractor. After receiving guidance from the Project Officer, construct the NEDD or NHASD sampling frame.

Once the test database has been created, and given the availability of comparison databases, evaluate the estimates generated from the newly created database by comparing the estimates with available data.

The final report will include the interim report as well as the results of the comparison with other data. It should contain the full description of the database, the process used for developing it, the results of the comparison with other available data, and an evaluation of the advisability of developing the NEDD or NHASD on an annual basis.

C.11.4. Extract the Data from the Outpatient Databases, Merge Data, Create Weights, and Create the Files

If it is determined that the database should be created, develop the final file. If appropriate, develop sampling weights so that national and regional estimates can be developed using the NEDD or NHASD. The NEDD or NHASD may consist of several files that are structured to allow efficient use of the database. Both SAS (for AHRQ use) and ASCII (for restricted access public dissemination) versions of the databases should be created.

C.11.5. Document the Database

Prepare documentation to fully describe the creation of the database and its data elements, including a description of how to obtain weighted estimates. The documentation should be developed to be consistent with the documentation for the routine products developed for HCUP (e.g., SID, SEDD, SASD, NIS, and KID). Also, the Contractor shall document the software and processes used to develop and maintain these databases consistent with the documentation requirements described for the other databases.

C.11.6. Obtain Agreement from States for Release of the New Database

If it is determined that the database is acceptable for release, negotiate with the states to gain permission to extract observations from the processed HCUP state databases to create the NEDD or NHASD.

C.11.7. Prepare the Database for Dissemination

Develop the materials required to disseminate the database to users outside AHRQ. This should include writing the database to CDs (in ASCII format) which are ready for reproduction and developing documentation.

C.11.8. Deliver the NEDD or NHASD and Documentation

The NEDD or NHASD should be delivered to the Project Officer in an agreed upon format with all accompanying documentation. Included in the documentation should be all programs developed to produce the database.

C.11.9. Disseminate Databases

After the databases have been tested and approved by the Project Officer, disseminate the databases through the Central Distributor.

C.12. NEW SPECIALIZED DISCHARGE-LEVEL DATABASE

Task C.12 - C.12.7 is an Option.

During the course of the project, create at least one specialized hospital discharge-level database for making national estimates that has the possibility of being created periodically thereafter. In year 3 of the contract, conduct an analysis that will assess the feasibility and advisability of creating a new specialized discharge-level database.

Examples of the types of databases that could be developed are:

- Databases designed to take advantage of specific information from selected states, such as the ability to detect readmissions.
- Panels of hospitals over time to allow for longitudinal research.
- Samples of markets to allow for market-level research.

Some or all of the following process will be required for creating this specialized database.

C.12.1. Develop the Concept, Create a Test Database, and Evaluate the Database

Prepare and deliver an interim report that describes sampling and weighting options (for a database that would be used for national estimates) and that outlines design options for the desired database. This report should include an evaluation of the feasibility of developing the specialized database, along with recommendations about which sampling/weighting option would provide the most reliable estimates. The Project Officer will review this report and make a final determination about the sampling strategy to be followed by the contractor. After receiving guidance from the Project Officer, construct the specialized database sampling frame.

Once the test database has been created, and given the availability of comparison databases, evaluate the estimates generated from the newly created database by comparing the estimates with available data.

The final report will include the interim report as well as the results of the comparison with other data. It should contain the full description of the database, the process used for developing it, the results of the comparison with other available data, and an evaluation of the advisability of developing the specialized database on a periodic basis (e.g., annually).

C.12.2. Extract the Data from the SID, Merge Data, Create Weights, and Create the Files

If it is determined that the database should be created, develop the final file. If appropriate, develop sampling weights so that national estimates can be developed using the specialized databases. A specific database may consist of several files that are structured to allow efficient use of the database. Both SAS (for AHRQ use) and ASCII (for restricted access public dissemination) versions of the databases should be created.

C.12.3. Document the Database

Prepare documentation to fully describe the creation of the database and its data elements, including a description of how to obtain weighted estimates. The documentation should be developed to be consistent with the documentation for the routine products developed for HCUP (SID, NIS, and KID). Also, the Contractor shall document the software and processes used to develop and maintain these databases consistent with the documentation requirements described for the other databases.

C.12.4. Obtain Agreement from States for Release of the New Database

If it is determined that the database is acceptable for release, negotiate with the states to gain permission to extract observations from the processed SID to create specialized databases.

C.12.5. Prepare the Database for Dissemination

Develop the materials required to disseminate the database to users outside AHRQ. This should include writing the database to CDs (in ASCII format) which are ready for reproduction and developing documentation.

C.12.6. Deliver the Specialized Databases and Documentation

The specialized databases should be delivered to the Project Officer in an agreed upon format with all accompanying documentation. Included in the documentation should be all programs developed to produce the database.

C.12.7. Disseminate Databases

After the databases have been tested and approved by the Project Officer, disseminate the databases through the Central Distributor.

C.13. THE AMERICAN HOSPITAL ASSOCIATION ANNUAL SURVEY

HCUP has a long-standing partnership with the American Hospital Association (AHA) not only to purchase their annual survey data for internal analytic use, but to re-release selected data elements in the HCUP files distributed to the public under the restrictive HCUP DUAs.

The AHA Annual Survey of Hospitals file (hereafter, AHA Annual Survey) will be used by the Contractor (1) to identify hospitals for the sampling frames of the NIS, KID, and other such databases, (2) to develop corresponding weights for these databases, and (3) to serve as an internal analytical file with a rich source of linkable information at the hospital level to the HCUP project. HCUP databases and other discharge-level files may be linked to the AHA Annual Survey via a hospital-level crosswalk file created by the Contractor (see below), allowing access to hospital characteristics. Some of the AHA data elements (e.g., hospital location by county and ZIP Code) also allow for linkage to other files for community characteristics. The HCUP Web site contains further description and documentation of the AHA database that has been created each year from the data files obtained from AHA.

The AHA Annual Survey is based on the hospitals' fiscal year, which usually ends on September 30. The AHA sells the AHA Annual Survey file near the end of following calendar year. For example, the 2004 AHA Annual Survey is sold in December of 2005. Processing of new HCUP data from the Partners should be structured to avoid delays caused by this lag in AHA data.

C.13.1. Create the HCUP AHA Analytic File

C.13.1.1. Annually Acquire the Most Recent AHA Annual Survey File

Every year of the contract period, the Contractor shall purchase the most recent release of the AHA Annual Survey within 2 weeks of its availability. The Contractor shall negotiate new annual agreement as necessary. The annual agreement is typically a brief written document along with e-mail documented agreements. The approximate cost will be \$7,000 each year.

C.13.1.2. Check for Changes in Variable Set and Definitions

The variables collected on the AHA Annual Survey can change from year to year. The Contractor shall check for changes in the availability of variables and variable definitions. The Contractor shall alert the Project Officer about changes that would affect any of the subsequent processing steps for HCUP. It is possible that some new variables will be retained. Subsequently, the Contractor shall prepare and deliver to the Project Officer the HCUP AHA Annual Survey Analytic File (a SAS dataset, unless an argument can be made for a different software system for relational database management) that maintains the structure, coding and naming conventions of past years of AHA Annual Survey data created for the HCUP project, to the maximum extent possible. Documentation of the previous processing of the Annual Survey file will be provided to the Contractor upon award.

C.13.1.3. Create AHA Crosswalk Files

Each year, the Contractor shall create and deliver to the Project Officer AHA crosswalk files that create a link between the hospital identifier provided by the data source (HCUP data element DSHOSPID) and the AHA identifier (HCUP data element IDNUMBER/AHAID). There may be one or several DSHOSPIDs for each IDNUMBER/AHAID. A hospital report to AHA may

combine several facilities, as convenient to the reporting entity, and not related to state facility reporting requirements. The Contractor shall create and maintain an internal project hospital identifier (HCUP data element HOSPID) that is unique to the HCUP project and of no value to the outside world but has a one-one correspondence to the IDNUMBER/AHAID each year that the IDNUMBER/AHAID continues to exist in the AHA Annual Survey. Outdated HOSPIDs should never be re-used. The one-one correspondence of HOSPID and IDNUMBER/AHAID is essential for each year's stratified sample and for weights supplied in the NIS and KID files. Note that the composition of the HOSPID (i.e., the specific state facilities with different DSHOSPIDs) may change over time due to facility closures, openings, mergers or de-mergers.

The Contractor should create each state-specific Crosswalk File soon after both the state discharge file and the AHA Annual Survey file are available. This typically occurs after the corresponding state SID is delivered to AHRQ. Creating the state-specific crosswalk files generally involves updating the corresponding crosswalk from the previous year. The creation of the crosswalk will require some time for checking the crosswalk from the previous year and consulting with a supplementary file from the AHA on closures, mergers and other status changes (see below). Later in the year, when all source files have been processed and all state-specific crosswalks have been developed, the Contractor shall deliver a consolidated AHA Crosswalk File, with self-explanatory variable labels and a brief documentation as produced in recent years. Consideration will be given to additional variables that might be useful on the AHA Crosswalk File for better assessment of hospitals that cannot be linked to AHA data in the same year, or where the link appears suspicious.

C.13.2. Compare AHA Data with State Data

Supply a table of summary data describing the AHA Crosswalk File. Create a separate table for each participating state showing the number of discharges for each IDNUMBER/AHAID compared to the total number of discharges for the set of state hospital identification numbers (DSHOSPIDs) corresponding to the IDNUMBER/AHAID to illustrate any discrepancies. Analyze significant discrepancies that may be due to fiscal year definitions, imputed estimates in the AHA Annual Survey, incomplete data from the state, or other and unknown causes. The effort should be kept reasonable and proportionate to the total percentage of discrepancy in total discharges.

C.13.3. Create File of Hospital Status Changes

This file will identify and clarify any new or deleted IDNUMBERs/AHAIDs. Use the reference materials supplied by AHA about closures, mergers, de-mergers, openings and check for consistency with the contents of the actual survey file supplied in the current and previous year. Errors and inconsistencies have often been found in the past. Some of these may never be corrected by AHA. Contact AHA to discuss anomalies and non-matchable facilities and keep notes to be available for occasional studies of closures, mergers and other changes of organization. Submit a final annotated document on AHA IDNUMBER/AHAID changes to the Project Officer, with notes of unresolved anomalies. It is expected that fewer than 200 such problems will be observed per year. Due to time pressure each year to create the NIS it may turn out that, based on checking the reference materials from AHA, a crosswalk will need to be revised later and a new edition can then be delivered.

C.13.4. Document the AHA Files

C.13.4.1. Document AHA Annual Survey Changes

Document changes in the AHA Annual Survey, especially those that have implications for research applications that use similar variables for multiple years (e.g., addition or deletion of survey questions and data elements). Ensure that all such documentation appears in the electronic documentation system (section C.17). In the past, we have maintained a single table that indicates which variables are available each year. This type of table should be updated each year unless some new type of query method is justified.

C.13.4.2. Document Variables

The HCUP AHA Annual Survey Analytic File created from the AHA Annual Survey should have variable labels and value labels for all variables. Prepare a document http://www.ahrq.gov/fund/contarchive/rfp060009.htm with variable names and definitions to reside on the HCUP-US Web site as currently available. Create a hard copy Survey Notebook containing: an annotated copy of the survey instrument, the file layout supplied by AHA, contents of the data file with variable labels, and summary data for each variable (means for continuous variables, frequencies for classifying variables that have more than 1 or 0.) This notebook duplicates material inserted in the online documentation or delivered electronically, but has proved helpful to researchers at AHRQ.

C.14. HCUP SUPPLEMENTAL / LINKABLE FILES

Task C.14 - C.14.3 is an Option.

The Contractor shall develop supplemental or linkable files and additional such data that are valuable to users of HCUP and other hospital discharge data for research, reporting, and technical assistance. In many cases it is more efficient and timely to supply supplemental or linkable hospital-level or area-level data files separately rather than inserting such data directly in HCUP databases. Typically, these linkable data files arise from sources requiring a more lengthy acquisition and approval process. For example, the HCUP Cost-to-Charge Ratio Files (CCRs) (see http://www.hcup-us.ahrq.gov/db/state/costtocharge.jsp) which include data elements that can be linked to the HCUP NIS and SID files are made available several months after the release of the corresponding database because of delays in acquiring the necessary data to produce them.

At present there is one annual linkable file required, several periodic or exploratory examples that are candidates for implementation, and other possibilities for the future. Each year, the Contractor shall recommend to the Project Officer several supplemental or linkable files to be created for the contract year. The Project Officer will select supplemental or linkable files and one exploratory study for the year. The currently required annual linkable file is the HCUP Cost-to-Charge Ratio File (CCRs). Details are provided below.

C.14.1. HCUP Cost-to-Charge Ratio (CCR) Files

The HCUP Cost-to-Charge Ratio (CCR) files consist of three stand alone hospital-level files and are created each year. One file consists of the universe of HCUP hospitals for the corresponding year and is used for intramural research only. The other two are derivative files

for public release: the NIS Linkable file and the CD-SID Linkable file. The programming uses the CMS Cost Report files, which are also released annually. There is some lag in availability of data that are sufficiently complete. For example, CMS data for hospital year 2002 were taken from accounting reports filed by December 31, 2004, that were made available by CMS in February, 2005. HCUP expects to speed up the process by at least three to six months in the future. (We are doing experiments on timing during 2006.) The Contractor shall download or acquire by mail the CMS financial database in June or September of each calendar year (cost has been \$100). This will yield the raw data needed for the hospital data year, generally two years earlier. Programs will be available from AHRQ for linking the CMS data to AHA annual survey data and to the HCUP hospitals, checking for completeness and credibility of the data and then calculating the cost/charge ratios. About two-thirds of the hospitals will have sufficient data for hospital-specific, all-payer, inpatient CCR. A weighted group average for every hospital will be calculated using a peer group classification that has been developed and tested in various ways over the last few years. The Contractor shall complete the full intramural CCR file and documentation within three months of receiving the CMS database.

Several component steps should be observed:

- Check the relevant CMS databases for changes in reporting and release of data and then develop program modifications as needed to extract data.
- Link the CMS data with the AHA data using Medicare Provider Numbers supplied by the AHA. Create the AHRQ intramural file using code developed in previous years and the data extracted from CMS. The Contractor staff will thoroughly examine all programming to suggest modifications and new refinements.
- Create basic documentation for the NIS and CD-SID files (User Guides) with guidance on use that adapts to Partner restrictions. (See current examples on HCUP-US under Cost to Charge Ratio Files).
- Produce a NIS-compatible file for public distribution that meets the restrictions requested by Partners. Produce a SID Central Distributor file for public distribution that meets the restrictions requested by Central Distributor participants.

For budgeting purposes, the Contractor shall make an estimate for creating the linkable CCR files as one task. Based on this product, where current software is available but there are some complexities in using the CMS files which themselves are subject to change, other linkable HCUP files should be budgeted as somewhat lower or higher depending on source of data, ease of acquiring, software to be developed and documentation. Some products could be higher or lower.

In the 3rd year of the contract, when the KID database is produced for 2006 data, the Contractor shall create a corresponding file of cost-to-charge ratios relevant to the KID that meets the KID restrictions requested by Partners. Existing programs from the 2000 KID can be modified for this effort. There are a few differences in the creation of the CCR for pediatric cases. The marginal cost of this work over and above the routine cost/charge files should be modest.

DRG Adjustment Factors. The purpose of adjusting the hospital-wide CCRs is to remove the bias due to some departments in the hospital having higher CCRs than others, and patients not using all departments to the same degree. However, a cost estimate for each patient cannot be built up separately because (a) not all states require reporting of detailed charges by department, and (b) not all hospitals have complete CMS cost reports. Therefore, adjustment factors must be created from all cases in a subset of states and hospitals. The cases can be

sorted into DRGs and then average cost within DRG, using departmental CCRs can be calculated. This more refined cost estimate is divided by the hospital-wide estimate of cost in a DRG to get the DRG Adjustment Factor. The Adjustment Factors were created for data year 2002 and again for 2003 with sensitivity testing for stability and generalizability from a subset of states, broadly distributed geographically. It is envisioned that a replication some year after the first year of the contract. Documentation for the current DRG Adjustment factors will be provided during Year 1. Depending on the results of current work, a table of DRG adjustment factors and a brief user's guide shall be made available on the HCUP-US Web site.

C.14.2. Development of Other Linkable/Supplemental Data Files

The Contractor shall produce a total of three linkable files each year, plus one exploratory study. In addition to the HCUP Cost-to-Charge Ratio Files noted above, the following are brief examples for the Contractor to consider. Strategic decisions on all the candidates will be made during Year 1.

C.14.2.1. Market Area Competition Measures

A linkable file of hospital market area competition measures has been designed in intramural research and may be suitable for periodic replication and updating. Information for the definitions and sources of data will be supplied by AHRQ staff. Development and release of this file would be developed with the participation of AHRQ staff.

C.14.2.2. Hospital Management and Organization: Supplementary Data

This may involve acquisition of special survey data from AHA or sample surveys from elsewhere that encompass a sufficient number of hospitals in a broad geographic distribution. Opportunities are under investigation by AHRQ. After a planning meeting early in the first year, a plan of action will be developed that will probably involve implementing at least two such linkable files over the five year period. The issues of permission for re-release by the source, or permission for linking to HCUP Partner hospitals must be addressed.

C.14.2.3. Process Quality Measures Created for CMS

At present a number of measures on all patients within one of three principal diagnoses are supplied to CMS for the Hospital Quality Alliance by nearly all community hospitals (see: www.hospitalcompare.hhs.gov). These are designed for public reporting of practices in treatment of specific diseases to improve patient outcomes. AHRQ staff is conducting research with these data and it is likely that they will be found to be sufficiently useful to the general community of HCUP users. The Contractor shall meet with staff early in the first year to develop a work plan to make these linkable files available subject to restrictions on linking to hospitals in particular states.

C.14.2.4. Adding Variables from the AHA Survey

As an alternative to creating linkable files for release to the public, under consideration is adding a few variables from the AHA annual survey directly to the Central Distributor Hospital-level files that accompany the NIS, SID, SASD, and SEDD files. These should be selected to be helpful to analysts who would otherwise have to acquire and process other databases. Any such variables could only be released on the CD files with the permission of the AHA and HCUP Partners. AHRQ staff would assist in the negotiation. In general, it is expected that these data

would be measured at the hospital or geographic area level. As part of any feasibility study to add data for users, the Contractor shall recommend whether to add variables to current releasable files, as opposed to creating linkable files. See section C.14.

C.14.2.5. Evaluate and Create Readmission Variables

HCUP data is usually characterized as being "discharge-level", meaning each discharge has generated a record (the discharge abstract). In discharge-level data, it is difficult to identify readmissions to the same facility or identify visits to other facilities across time. In order to do that, it is necessary to assign a unique identification to individuals rather than discharges. Most state-level data includes an encrypted medical record number. This data element is broadly referred to as "MRN" in HCUP. This variable can be used to identify readmissions to the same facility over time, though often not across years if the encryption routine changes. In some state-level data, a unique encrypted person identifier has been assigned. This data element is broadly referred to as a "PNUM" in HCUP. The patient identifiers that HCUP receives from participating organizations have been encrypted, either by an algorithm or a random reidentification process. For organizations that don't supply unique, de-identified person-level identifiers, there are methods that may allow probability matching.

Under the current HCUP, several reports have been generated regarding person link data elements. One describes different linkage techniques. A subsequent report evaluated the completeness, accuracy and consistency of the person-link variables for the 2001 HCUP data and which was updated in 2006 for the 2003 data year. Finally, a report was conducted recommending possible pilot studies to further develop person links within the HCUP data. These reports will be made available in hard copy upon request.

The Contractor shall conduct several tasks that build upon the work achieved under the current contract.

C.14.2.5.1. Readmission/Revisit variables limited to states with a reliable person identifier

The Contractor shall provide a plan which reviews and builds upon a previous report, "Final Report for Linkage Variable Pilot Study http://www.ahrg.gov/fund/contarchive/rfp060009.htm. The report explored the feasibility of using a combination of demographic elements as a surrogate for the person identifier, especially for states that do not provide a Person Number (PNUM). The report also assessed the feasibility of a pilot study of states with a reliable PNUM to create readmission variables across time and setting. Option 3 in the report recommended developing readmission / revisit variables using existing intramural HCUP data that had reliable patient identifiers. Potential design options are provided, including the use of several variables (sex, date of birth, ZIP code) along with patient identifier to create derivative linking variables. The plan should address the feasibility, timeline and resources necessary to creating derivative readmission / revisit variables to identify and conduct analyses of readmissions / revisits to the same or different institution and/or setting across time for the same individual. For example, readmission / revisit data elements would ideally identify when a single individual appears in the hospital, then at a later date in the emergency department, or readmitted into the hospital. This will require an understanding of which state data have reliable, accurate, and complete encrypted patient identifiers, and the additional variables that are necessary to enhance and verify the encrypted patient identifier to create the readmission / revisit variables. The Contractor should assume that no more than 20 State Partners provide a reliable person identifier and the additional necessary data elements to implement this option (e.g. date of birth, ZIP code, gender).

The Contractor should plan and implement a State Partner workgroup to discuss the recommendations from the plan. The workgroup will consist of State Partners that currently produce and provide a reliable person identifier to the HCUP. The workgroup will serve several purposes. The workgroup will assess partners' understanding the value of person-link variables, will facilitate partner understanding of a newly proposed readmission / revisit variable, and evaluate partner support for producing this new variable on the intramural data bases, as well as evaluate partner support for releasing this new variable on restricted-access, public-release data bases. This workgroup will count as one of the Partner workgroups described in section C.18.2.1. The Contractor should assume a bi-monthly workgroup call, not to exceed 6 calls. The Contractor should organize and convene the calls, and provide a summary of the discussion including any decision points following each call.

If it is determined that production of new readmission / revisit variables is feasible and supported by the Partner States, then the Contractor shall pilot test the variable with the 2006 SID data and implement the production of new readmission / revisit variables into the 2007 HCUP state and derivative data bases in Year two of the contract.

C.14.2.5.2. Readmission / Revisit variables limited to states without a person identifier

The Contractor shall provide a plan which reviews and builds upon an earlier report, "Linkage Variable Pilot Study", which details a plan for implementing a variation of Option 3 described above. The report explored the feasibility of using a combination of demographic elements as a surrogate for the person identifier, especially for states that do not provide a Person Number (PNUM). The proposed task would be limited to State Partners that are known to collect patient identifiable personal data (e.g. SSN, address, first name, last name), but who *do not* currently produce a patient level link. The option in the report assumed reliable patient identifiers. Therefore, the plan should address the feasibility, timeline and resources necessary to aid State Partners to either produce a patient level link variable, encrypted or re-identified (e.g. PNUM) or to produce a derivative readmission / revisit variable that would be released to HCUP. The Contractor should assume no more than 20 State Partners.

The Contractor should include a State Partner workgroup to discuss the recommendations from the plan. The workgroup will consist of State Partners that are known to collect patient identifiable personal data (e.g. SSN, address, first name, last name), but who do not currently produce a patient level link. The workgroup will serve several purposes. This workgroup will count as one of the Partner workgroups described in section C.18.2.1. The Contractor should assume a bi-monthly workgroup call, not to exceed 6 calls. The Contractor should organize and convene the calls, and provide a summary of the discussion including any decision points following each call. The workgroup will assess Partners' understanding the value of person-link variables, will facilitate Partner understanding of a newly proposed patient-level link (e.g. PNUM) or readmission / revisit variable. The workgroup will establish whether there are Partner states that are not currently producing a person-level identifier, but would be interested in doing so. For those Partners who express interest in producing a person-level encrypted identifier or a readmission / revisit variable, the workgroup will assess what support the state would need to proceed. The support could vary: 1) technical assistance regarding methods; 2) understanding from other Partner states that produce person-link variables what the confidentiality or legislative or regulatory hurdles can be; or 3) human or financial resources required producing the variable. The workgroup will also evaluate Partner support for providing either a person-link variable or a derivative readmission / revisit variable to the HCUP and / or releasing this new variable on restricted-access, public-release databases.

If it is determined that production of new person-level links or derivative readmission / revisit variables on the Partner source data is feasible and supported by the Partner states, and that at a minimum the derivative readmission / revisit variables would be released to HCUP, then the Contractor shall pilot test the variable with the 2008 intramural data and implement the production of either the new person-level link or readmission / revisit variables with the 2009 HCUP state and derivative data bases beginning in Year four of the contract.

C.14.2.6. Other Linkable Files

Recommendations from Partners, AHRQ staff, outside experts and the Contractor may warrant exploration in the second year of the Contract. The Contractor should add at least one linkable file in this category starting in Year 3 of the contract.

C.14.3. Annual Memo Recommendations

The Contractor shall develop, in a memo, suggestions on the release of new linkable files, based on likely value of the data to prospective users, permission issues, and cost of acquisition or creation. For example, one potentially interesting target would be data on physician services and payments for particular procedures by area, and other non-hospital service data or relevant demographic data available at the ZIP Code, county or state level. Data now available in the ARF, or with a high cost of purchase, would generally not be considered. In general, a linkable file for public release would not be created until first demonstrated to be useful in pilot research and reporting applications.

Suggestions by the Contractor for other potentially valuable data, to be supported by a feasibility study of sources, value to users, cost and a process to release data as permitted by sources and HCUP Partners will also be requested.

C.15. HCUP CENTRAL DISTRIBUTOR

The HCUP Central Distributor is the entity that handles all activities directly related to the sales and dissemination of the "restricted access public release" versions of the HCUP databases and related HCUP files that are authorized by individual State Partners. These versions of the HCUP databases and files are described in sections C.8.4.6. Once these databases are created, they are sent to the HCUP Central Distributor for dissemination.

In general, the main functions of the HCUP Central Distributor are to handle all inquiries about the availability and purchasing of HCUP databases and related HCUP files; send, receive, and verify completeness of applications; copy and send files to approved data requesters; collect data use fees; reimburse fees to the appropriate State Partners; prepare and send monthly activity reports to State Partners; and perform other related tasks that are described more fully below.

Available HCUP Products

Currently, the following HCUP databases are available through the HCUP Central Distributor:

- Nationwide Inpatient Sample (NIS) beginning in 1988;
- Kids' Inpatient Databases (KID) for 1997, 2000, and 2003;

- State Inpatient Databases (SID) beginning in 1990;
- State Ambulatory Surgery Databases (SASD) beginning in 1997; and
- State Emergency Department Databases (SEDD) beginning in 1999.

In addition, the following HCUP Cost-to-Charge Ratio Files are available:

- NIS beginning with 2001; and
- SID beginning with 2001.

In total, there are currently over 300 HCUP products available through the HCUP Central Distributor. Please see application kits for information on the release of the NIS, KID, SID, SASD, SEDD and Cost-to-Charge Ratio files through the HCUP Central Distributor.

Contact Information

The HCUP Central Distributor established and maintains the following contact channels for users interested in HCUP products:

- 1 Toll-free phone number designated exclusively for HCUP;
- 2 Fax number: and
- 3 Email address designated exclusively for HCUP.

Electronic Tracking System

An electronic tracking system in Microsoft Access Database is currently used to organize and facilitate the work under the HCUP Central Distributor. This electronic tracking system retains all information on the HCUP Central Distributor including databases available, inquiries, applications, sales, and units shipped. It also includes information on who performed the task and when it occurred. To maintain the smooth operation of the HCUP Central Distributor, the Contractor shall use the existing processes and structure during the first year. (See section C.15.9 for evaluation and possible modification of processes and the system in subsequent years.) More specifically, the Contractor shall perform the activities described below.

C.15.1. Operations

General Activities

The general activities of the HCUP Central Distributor in disseminating HCUP databases and files include the following:

- Maintain and operate an electronic tracking and distribution system (currently in Microsoft Access Database). See NIS, KID, and SID/SASD/SEDD <u>application kits</u> for information collected and entered. In addition, see reports related to electronic tracking system (i.e., "Evaluation of the HCUP Central Distributor Tracking System", December 7, 2001 and "Refined Tracking and Reporting System," July 10, 2002).
- Answer general inquires about HCUP databases and related products. Examples of such inquiries include the following: the availability data elements by database type and by state, costs of products, status of application, and dates of future data product releases.

- Answer other inquiries that require more detailed knowledge of the HCUP products disseminated. Such inquiries are limited to information about file layouts of the HCUP databases, guidance on how to use programs designed to load data into a statistical software package (e.g., SAS), and other such information directly related to the use of the HCUP products disseminated. The HCUP Central Distributor will not handle technical assistance questions that have no direct application to HCUP products. All other HCUP related questions should be directed to HCUP Technical Support. See section C.20.
- Send out and receive applications. Review applications for completeness. For other HCUP files (e.g., cost-to-charge file), applications are considered complete when all sections are appropriately filled out. For nationwide databases (i.e., NIS and KID), applications are considered complete when: (1) all sections of the applications are appropriately filled, (2) all relevant DUAs are signed, (3) indemnification clause is signed, and (4) all required fees are submitted. For state databases (i.e., SID, SASD, and SEDD), in addition to the requirements above, the application also must be approved by an AHRQ staff designated by the HCUP project officer.
- Determine and collect all fees as designated by AHRQ and the State Partners including applicable taxes from data purchasers where possible (e.g., in state where the HCUP Central Distributor has a business presence. Data purchasers may purchase HCUP products by check or by credit card.
- Make copies of the HCUP databases and files from "master" copies. Currently, databases and documentation are provided on CD-ROMs. Labels describing the products are screened onto the CD-ROMs. Prepare database binders. Database binders include the respective database and documentation on CD-ROMs and approximately 25 pages of general information about the respective HCUP product. Written binder materials are described in section C.8.5.
- Send out HCUP databases, related products, and documentation to approved data requesters. Approved data requesters are those whose applications are complete. (See comments above).
- Reimburse fees to the appropriate data organizations for purchases of statewide databases and taxes to the applicable local, state, and Federal organizations where possible. See "Pricing of Data" below.
- Conduct customers' mailings to announce recently available data.
- Refer inquires for more recent or sensitive data to the appropriate data organization representative as directed by the HCUP Project Officer.

Functions described above will be performed within time frames to be specified by the Project Officer. In general, all inquiries should be responded to within two business days. Products should be sent within two business days after the application has met all requirements. In shipping HCUP products, the Contractor should use a shipping / delivery service that has the capability of tracking the shipment, unless otherwise directed by AHRQ.

Contact Information Capabilities

To successfully perform these tasks, the Contractor should have the capability to establish and to receive inquires by mail, phone (toll fee to the requester / inquirer and designated exclusively for HCUP Central Distributor), fax, and email (designated exclusively for HCUP Central Distributor).

Pricing of Data

Prices of statewide databases are set by the individual data organizations. Data organizations are reimbursed for the sale of their respective databases. An additional fee of about \$20 is added to cover shipping/mailing costs and materials (e.g., CD-ROMs, binder). Costs for shipping/mailing and materials should not be included in the contract proposal. This additional fee does not cover labor charges / costs incurred by the Contractor. This fee can be changed with the approval of the HCUP Project Officer.

Prices for nationwide databases are set by AHRQ. There are two levels of prices for these databases: regular price (currently set by AHRQ at \$200) and student discounted price (currently set by AHRQ at \$20). AHRQ may implement a different pricing structure in the future. Costs to cover shipping/mailing costs and materials will be deducted from the revenues received for the sales of these databases. Any remaining funds will be applied to the shipping/mailing costs and materials of complimentary copies or other ways to promote HCUP as directed by AHRQ. Unlike the requirements of the previous contract, but consistent with the dissemination of the statewide databases, labor charges / costs should be included in the proposal.

The operations of disseminating the state and nationwide databases need to be distinct. The Contractor should have the capability to track and account for the funds from the dissemination of the nationwide databases, separate from the statewide databases. Every six months, the Contractor should provide a brief report that summarizes the revenues received and the costs incurred for this segment of the operation.

Volume of Inquiries and Purchases

The expected annual volume of inquiries and sales of databases for the first year of the contract are as follows:

Total Inquiries	600
General Inquires	480
Other Inquiries	120

Total Databases 1750 units

Nationwide databases 875 units (from 475 applications – see below) State databases 875 units (from 125 applications – see below)

Applications 600
Nationwide databases 475
State databases 125

Other Files (e.g., cost-to-charge file) 150

These figures include the complimentary copies noted above. For each of these figures, the Contactor shall assume an average annual increase of 10 % after the initial year.

C.15.1.1. Organization Restrictions for Central Distributor Operations

An organization's non-HCUP-related business shall remain completely separate from HCUP activities. HCUP activities shall <u>not</u> be used as an opportunity to promote the organization and/or the organization's products (e.g., non-HCUP databases, software) and/or services. For example, the Contractor, in the course of answering HCUP data inquiries, shall not direct or suggest to the inquirer, the use of the organization's products or services, or direct them to others in the organization with such knowledge. Nor shall the Contractor use information obtained about the inquirer to promote non-HCUP related activities at a separate time. The Contractor shall make it clear that they are acting on behalf of AHRQ. Contractor staff assigned to HCUP responsibilities should <u>not</u> be engaged in other organizational activities that may represent a conflict of interest to HCUP activities, or harm HCUP and AHRQ in any way.

C.15.2. Tracking System

An electronic tracking system in Microsoft Access Database is used to help organize and document the activity of the HCUP Central Distributor. As new products (i.e., additional states, years, and product lines) are added, the Access Database must be updated. Assume up to ten updates per year of the system. The activity report characterizes the information collected in the tracking system.

Information in the tracking system is considered identifiable and must be stored in a secure, limited-access environment. A process for handling this information must be included in the security plan. See section C.29.3.

C.15.3. Applications Kits

There are at least three applications kits for HCUP databases and files: NIS, KID, and SID/SASD/SEDD (www.hcup-us.ahrq.gov/tech_assist/centdist.jsp). Update existing application kits in each contract year as new states, years, and product lines are added. Provide draft copy in electronic format to Project Officer for review before finalizing materials. Assume that the NIS and KID application kits are updated annually. Assume that the SID/SASD/SEDD application kits are updated up to seven times per year. Assume three additional applications or forms will be created for new or existing HCUP files (e.g., cost-to-charge file) annually.

C.15.4. Customized Files

The HCUP Central Distributor should have the capacity to copy customized files onto a CD-ROM and ship them to authorized users. Customized files are described in Section C.8.4.7. Assume five such requests per year.

C.15.5. Monthly Activity Reports

Produce and provide monthly reports using the established prototype to all HCUP Partners about all the activities of the Central Distributor including the number and types of inquiries and purchases of data. This report is generated from the electronic tracking system (see Section C.15.2. In addition to the report, reimburse individual states for sales of their respective

statewide databases on a monthly basis (e.g., when the monthly report is disseminated). States are not reimbursed for any sales of the nationwide databases (i.e., NIS, KID).

For each year, assume up to seven updates to the report format which will require minimal revisions (e.g., the addition of several rows to tables to account for new products). For the entire contract period, assume up to three updates to the report format which will require moderate revisions (e.g., creation of two or three new tables.) Quality of the report (in terms of appearance and content) must be equal to or better than the existing prototype. See section C.15.9 for opportunities to refine these reports in future years.

C.15.6. Data Use Agreements (DUAs) and Mailing Lists

Collect and maintain DUAs from all authorized users of HCUP databases. The DUA is included as part of each application kit. This task entails creating a PDF copy of the signed DUAs, storing these in a secured environment, and transferring the original hard copies to AHRQ. Hard copies will be delivered alphabetically in labeled, coded folders.

In addition to the paper records, selected information about each customer and application should be entered into the electronic tracking system. From the tracking system, generate and maintain a mailing list for HCUP outreach efforts. The tracking system should provide a process to assure that purchasers are not added to the mailing list when this is indicated on the DUA that they do not wish to be on our mailing list.

C.15.7. Flyers, Postcards, and Promotional Materials

Design and create flyers, postcards, and other such promotional materials as directed by the HCUP Project Officer. Using the mailing list maintained by the Central Distributor, mail promotional materials as directed. In some cases, these materials may be included with the purchased databases. Assume that up to seven one-page flyers or postcards will be produced annually. Assume that two of these items will be mailed out to 1,000 users.

C.15.8. Exhibit Booth Representation

Task C.15.8 is an Option.

A representative from the HCUP Central Distributor will be asked to represent the HCUP Central Distributor at the AHRQ exhibit booth at various conferences and meetings. Assume one representative will attend three 3-day meetings at non-local exhibit sites designated by AHRQ.

C.15.9. Evaluation of Dissemination Processes and Tracking / Distribution System

Task C.15.9 is an Option.

The existing dissemination processes and tracking and reporting system will be used in the first year of the contract. At the beginning of the second year, evaluate and assess the efficiency of the dissemination processes and the tracking and reporting system. Provide a report outlining strengths, weaknesses, and recommendations for changes or refinements in the context of existing and emerging technologies. This may include a new system if recommended. Implement, create, or refine system under the direction of the Project Officer.

C.16. DELIVERY AND MANAGEMENT OF DATABASES, DOCUMENTATION, AND RECORDS

Keeping a record of activities for HCUP is a vital part of almost every task undertaken for the project. The Contractor shall generate documentation to accompany all HCUP components (e.g., databases, software, products, and reports) as they are developed and maintain the information in an organized, consistent manner that retains institutional memory. Naming conventions should be self-explanatory. Examples of HCUP documentation are located under "Database Documentation at www.hcup-us.ahrq.gov/databases.jsp.

Documentation will be stored in a manner that will protect the information while allowing appropriate access. Currently, HCUP documentation is stored in two ways: electronically on the HCUP-US Web Site (at http://www.hcup-us.ahrq.gov/) and hard copy archives. The majority of documents are in an electronic format, however the project dates back to the early 1990s and AHRQ holds extensive archive files.

C.16.1. Databases

C.16.1.1. Database Format

The format for data delivered to AHRQ should be in SAS, and for restricted access public release in ASCII. It is possible that future years of this contract will require other formats and/or media based on emerging or existing technologies, for example, data might be received through a secure Internet transfer to a central AHRQ data warehouse.

C.16.1.2. Source Data Destruction

At the direction of AHRQ, all source data received by the Contractor from HCUP State Partners shall be destroyed approximately two years after completing the HCUP data files, unless the state-specific HCUP Memorandum of Agreement requires that the source data be returned to the HCUP Partners. Destruction of electronic data files shall be implemented either through physical destruction or erasure. Certification of destruction shall be sent to the AHRQ Project Officer and the HCUP State Partner following file destruction. After the termination of the HCUP contract, AHRQ may, at its sole discretion, choose to retain the HCUP intramural, data development, and restricted access public release databases to support longitudinal research.

C.16.2. Documentation

C.16.2.1. Data File Maintenance System

Large volumes of processing programs are used in the creation of HCUP databases and software. The Contractor shall keep records and document software requirements analyses, software development, testing, code documentation, quality assurance and software change management as necessary. The Contractor shall also maintain version control, and naming conventions. The Contractor shall develop and deliver a memo with a description of a proposed file maintenance system for databases and other files related to data editing, analysis and data processing and programming efforts. The system should include naming conventions and tracking of files from production through final delivery. After approval from the Project Officer, put the maintenance system into place that allows for routine review, backup, and/or release of all HCUP state files as appropriate. Assure appropriate disposition of project and data files that

will no longer be needed as work proceeds throughout the contract period. Include documentation of which files need Project Officer approval before destruction can take place.

C.16.2.2. Create Documentation

The Contractor shall generate documentation files to describe all HCUP components as they are developed. Some key documentation components include but are not limited to: processing programs, databases (e.g., NIS, KID, SID, SASD, SEDD, and AHA) including intramural and restricted access public release versions, reports, special studies, software, tools, and linkable files. For HCUP databases, documentation should not be recreated for different versions of the same database, but should represent a subset of a "master file." For example, documentation for restricted access public release versions of HCUP databases is the same as the corresponding intramural version with the exception that certain data elements have been removed. Documentation must accompany all database deliverables at the time of data delivery to AHRQ. Delivery of databases or other HCUP components without documentation is not an acceptable deliverable.

All database and software documentation will be delivered in electronic format accompanied by a memo describing file contents and structure. In addition, documentation shall be posted in the HCUP-US documentation system. Delivery of electronic files is accomplished by posting to the password-protected side of the HCUP-US Web site. Documentation for new data years will be added to the existing structure of HCUP-US for each data year as information becomes available or when information requires correction.

C.16.2.3. Project Management Records

The Contractor shall maintain a consistent style, format and quality in all HCUP reports, special analyses, and written materials. In most cases, written materials will be delivered by; 1) Posting to the HCUP-US documentation system, and 2) delivering hard copies. All reports, memos, and documentation will be delivered electronically and with non-bound original and 2 hard copies.

C.16.2.4. Documentation Quality

The volume of documentation generated by HCUP each year requires careful control. The Contractor shall create an HCUP policy for handling documentation and management records. The policy will include methods for quality control such as naming conventions, version control, storage, and destruction of information when it is no longer needed.

C.16.3. Back-up System for All Documentation

It is necessary to retain certain paper archives relevant to state recruitment and retention activities. At present, these include, but are not limited to: state applications, MOAs, technical documentation checklist, data restriction checklist, correspondence significant to negotiations, manuals, and data format libraries. All archived hard copies of recruitment documents will be delivered to the Project Officer at a minimum of every six months. No HCUP documentation will be destroyed without approval from the Project Officer. The Contractor is strongly encouraged to utilize conversion of hard copy documents to electronic versions; however, certain original documents designated by the project officer must be delivered to AHRQ on a quarterly basis in hard copy format.

The Contractor shall develop and implement a reliable back-up system to prevent permanent, accidental loss of any HCUP documentation files. The current collection of documentation will be preserved to ensure adequate support for researchers. Back-up will be in media and formats readily accessible to the HCUP Project Officer. Keeping back-up files in a format that is readily accessible may require conversion to a newer application at least once during the period of this contract. With approval of the HCUP Project Officer, certain older files may be archived and placed in an alternative storage site.

C.16.4. Evaluation of Records Management

The Contractor shall evaluate the process for creating and maintaining documentation. Provide a report outlining strengths, weaknesses, and recommendations for changes or refinements in the context of existing and emerging technologies. Implement, create, or refine a system under the direction of the Project Officer.

C.17. HCUP-US WEB SITE

The HCUP User Support Web Site serves two critical functions: (1) it is the project's primary vehicle for public outreach and (2) it is a virtual repository for nearly all project information and documentation. HCUP databases are not stored on the HCUP-US Web site. All documentation is archived on HCUP-US with the exception of hard copy documents that are generated as a result of Partner recruitment activities. The Web site allows for various levels of access to materials and is password protected. Currently, there are seven access levels, however the majority of informational material is identical.

C.17.1. Maintain Content on the HCUP-US Web Site

The Contractor shall maintain the HCUP-US Web site on their server as a "third-level domain" to the AHRQ Web site. The Contractor can assume that routine updates to some existing information in HCUP-US can be made without prior approval from AHRQ, (e.g., the addition of deliverables). In general, new items will not be posted or removed from the HCUP-US Web site without prior approval from AHRQ. Conversion of documents into HTML will also require review and approval from AHRQ. The Contractor shall develop a policy for control of Web site content, including the process of approval for posting materials.

C.17.2. HCUP- US Web Site Policy and Regulations

The Contractor shall be familiar with law, regulations and policies for Federal Web sites as made available on the FirstGov Web site at http://www.firstgov.gov/webcontent/laws_regs_policies.shtml. Federal guidelines require that Web site design and maintenance give careful consideration to public accessibility needs, although standards and best practices for accessibility are expected to emerge and evolve over time.

C.17.3. HCUP-US Web Site Format and Accessibility

Current standards suggest that the best practice for Web site accessibility is to utilize standard HTML, XHTML, or XML-formatted pages, including most downloadable documents. For some content such as large statistical tables there may be a business need to generate downloads as Portable Document Formats (PDF), such as Adobe Acrobat, as an alternate format to native

web formats. When using PDF files, the Contractor shall provide a link to the downloadable free viewer. When linking to a non-HTML document, the Contractor shall include a text description of the file, including the name, file type, file size, and effective date.

Current standards suggest that the best practice for Web site accessibility is to utilize standard HTML-formatted pages, including most downloadable documents. For some content such as summary statistics it is not possible to generate HTML-formatted pages either programmatically or by converting existing content. Other documents, such as reports, can be converted to HTML format but may require manual review or verification to ensure the result is accessible to a broad audience.

The Contractor should assume that the HTML and XML format for existing documents will be maintained and the majority of new documents will be posted in HTML. AHRQ will designate alternative applications to use in the event that the size and complexity of a document prohibits reasonable time and effort for conversion to HTML. In this case the Contractor shall work with AHRQ to determine the optimum approach for addressing public access needs. In rare cases Web documents may require delivery in two versions (e.g., PDF and RTF). HTML documents containing graphics and visual designs will usually require both HTML and PDF versions for delivery. When the Contractor delivers documents to be posted on the HCUP-US Web site, it must be verified for accessibility using Watchfire's Bobby (or a similar tool) before submission to AHRQ for review. For more detailed information see the Federal Web site guidance at http://www.firstgov.gov/webcontent/laws_regs_policies.shtml.

C.17.4. Enhancing the HCUP-US Web Site

The Contractor shall work with AHRQ to identify and implement up to four enhancements to the HCUP-US Web site per contract year. Examples of past enhancement activities have included:

- Re-design of the HCUP Partners section to be more user-friendly and accessible
- Addition of a search engine to the site
- Development of a technical manual describing the site organization and underlying structure
- Creation of new section to archive final project-end reports and materials
- Automation of certain updates to the database documentation that were maintained manually in the past
- Addition of summary statistics for HCUP databases

C.17.5. Management of the HCUP-US Web Site

The Contractor's Web development staff will meet by phone with AHRQ staff at least monthly to review areas of interest for potential development, monitor progress on tasks, and discuss Webrelated issues. The Contractor shall provide an agenda for each conference call before the meeting takes place.

C.17.6. Technical Guide to Web Site

The Contractor shall develop a Technical Guide to the HCUP-US Web site. The Technical Guide is intended to provide the technical information that would be needed to re-create the HCUP-US Web site in the event of a catastrophic loss of the Contractor's server. The goal for the technical guide is to maintain consistent Web site operation with little or no loss of

information. The guide should include procedures for taking the HCUP-US Web site off-line in the event of a system failure and procedures for bringing the site back on-line and ensuring system availability.

C.18. IMPROVING HCUP DATA THROUGH TECHNICAL SUPPORT FOR PARTNERS

Task C.18 - C.18.8 is an Option.

C.18.1. Background

The partnership between the Federal government and data organizations is the foundation of HCUP. Data organizations voluntarily participate in HCUP by allowing the purchase of their data and participating in project initiatives. As such, HCUP is continually seeking ways to improve the partnership and meet the needs of HCUP Partners and the Federal government. HCUP Partners are interested in receiving technical assistance on the collection and use of their statewide encounter data and want AHRQ to facilitate communication and information exchange among Partners about data collection and use. Such support by HCUP will ultimately improve the quality, consistency and timeliness of the data HCUP receives from Partners. The purpose of this task is to provide technical support for Partners to improve the collection and use of inpatient and outpatient data.

The potential areas for technical support for data collection cover the entire collection process from the development of a data initiative, collection of data within hospitals, the transmission of data to the Partner organization and the processing and checking of data by the Partner organization. Topic areas of interest to Partners include but are not limited to national standards for data elements in inpatient and outpatient encounter data, electronic transmission of encounter data, improved timeliness, edit checks and other data quality issues, and adding clinical content and other analytically useful data elements to encounter data. The topics also include the advances in health information technology that may lead to improvements in their data programs including the electronic healthcare record, Regional Health Information Organizations, and the National Health Information Network.

The potential areas of technical support for the use of the data include the development of analytic tools that Partners can use to analyze their inpatient and outpatient data to answer their policy, programmatic, or management questions. Because HCUP Partners are at various stages in the development, collection and use of inpatient and outpatient encounter level data, some Partners may need assistance in identifying important, policy or program relevant questions that can be answered with encounter level data. Statewide encounter data can inform questions related to the cost-effectiveness of care, the quality, safety and continuity of care, access to care for those enrolled in public insurance programs such as Medicaid/SCHIP or Medicare, public health goals, and program planning, budget forecasting and evaluation. The type of questions asked of HCUP Partners is dependent on who the Partner must respond to. In general, hospital associations must be responsive to the needs of the member hospitals and state government must be responsive to the needs of state policymakers, other state agencies, and community groups.

Examples of tools that may address these issues generally include tools for users developed under Section C.22, benchmarking reports that measure disparities and access to care, evaluation of various risk adjustment and rate setting methods, and models that project program costs or predict the impact of policy changes (see *The Value of Hospital Discharge Databases*).

In addition to analytic tools, many Partners would benefit from a reporting template that discusses and displays the content and format of a report for target audiences (target audiences might include the public at large, policy-makers, hospital staff and other health professionals, local government, public health officials or community groups).

The Contractor shall perform the tasks specified below to provide technical support to Partners. The Contractor shall participate in monthly conference calls with AHRQ staff on this task and provide a quarterly report to AHRQ summarizing task activities. The report should include brief descriptions of workgroup calls, LISTSERV activity, brief description of conferences, brief description of Federal and national initiatives, posting on HCUP-US, individualized technical assistance to Partners, brief description of educational briefs, brief summaries of data standards activities. In addition, AHRQ expects that information obtained from Partners during the course of this task will be treated with sensitivity as Partners may be willing to share information as part of a learning network with other Partners, but may prefer that this information be shared only within the Partnership

C.18.2. Facilitate Communication With and Among the HCUP Partners

Communication with and among the Partners is important to provide them with updates on emerging issues and to facilitate knowledge transfer and information exchange between Partners. As specified below, the Contractor shall lead, support, and encourage communication through a Partner LISTSERV, supporting Partner workgroups, participation in meetings that many Partners attend, and maintenance of sections of the HCUP-US Partners' Web page devoted to data collection and data use issues.

C.18.2.1. HCUP Partner Workgroups

The Contractor shall form workgroups of representatives from HCUP Partner organizations when the need arises, as specified by the Project Officer. The workgroups may be on specific topic areas of interest to Partners or AHRQ, they may be focused on specific technical assistance products being developed under section C.18.7 and there may be a workgroup that provides more general advice on the priority areas to address in the Technical Support for Partners task. The Contractor shall handle all the logistical arrangements for the conference calls such as notification of meeting time, agenda, conference call phone line, and minutes of the calls. The Contractor should anticipate three active workgroups per year. The size of the workgroups will vary depending on the nature of the workgroup objective and Partner interest. The Contractor should assume that three active workgroups (i.e., topic area one workgroup, topic area two workgroup, priority setting workgroup) each year will include 30, 20 and 10 Partner organizations, respectively. The Contractor should also assume that each workgroups meets via conference call four times per year. Summaries of calls should be posted on HCUP-US Partner page. Brief descriptions of the workgroup activities should be included in the Technical Support for Partners quarterly report.

C.18.2.2. HCUP Partner Listserv

The Contractor shall manage and host an HCUP Partner LISTSERV devoted to information exchange and discussion of issues concerning data collection and use of inpatient and outpatient data. It is anticipated that there will be about six new postings per month on the LISTSERV. Each quarter the Contractor shall post on the HCUP-US Partners Web page a summary of the substantive LISTSERV discussions that have occurred and provide a list of these topics in the Technical Support for Partners quarterly report.

C.18.2.3. Participation in Conferences and Other Meetings of HCUP Partners

Conferences and other professional meetings attended by large numbers of HCUP Partners are venues for information and knowledge exchange on data collection and use. Consequently, it is important for the Contractor to actively participate in these meetings to meet the objectives of this technical support task. The Contractor should assume that each year two staff members travel to and attend the annual National Association of Health Data Organizations (NAHDO) meeting. The Contractor should also assume that each year one staff member travel to and attend two other national meetings relevant to the Partners, such as an AHRQ-sponsored conference and the Allied Association Information and Resource Network (Air2Net) meeting. The first meeting is generally held in the Washington DC area, and the last two meetings are held in various locations each year.

C.18.2.4. Review of Information about Relevant Federal and National Initiatives

The Contractor shall maintain a list, brief description, and contact information for Federal and national initiatives that are relevant to the collection and use of hospital-based inpatient and outpatient data and ambulatory care data. Federal and national initiatives may include but are not limited to activities related to health information technology, funding opportunities, development and quality improvement of encounter level data, development and use of quality indicators, activities sponsored by various national organizations (e.g., AHA, National Governor's Association, National Conference of State Legislatures, National Association of State Medicaid Directors, National Academy of State Health Policy). This list should not be considered comprehensive, and should be updated and supplemented on a regular basis. The Contractor should assume two staff hours per week to maintain the list with minimal effort. The list should be posted on HCUP-US Partner page. Brief descriptions of the list should be included in the Technical Support for Partners quarterly report.

C.18.2.5. HCUP-US Partners' Web Page Sections on Data Collection and Use

To facilitate information exchange and networking among Partners and to provide easy access to technical support products, the Contractor shall maintain a section of the HCUP-US Partners Web page devoted to technical support. The information in this section must be user-friendly and searchable. The Partner Web page will contain products and resources developed as part of the Technical Support for Partners task. It will also contain other resources (or internet links to resources) related to data collection and use that may be of particular relevance to HCUP Partners, such as: state-specific documents on data collection, state-specific information on data submission and editing processes, definitions and use of outpatient and inpatient data and data elements, calendar of events, frequently asked questions and responses, information on how to access various resources, description of and links to Federal and national initiatives that may be relevant to Partners, and links to other resources (e.g., Web sites of the National Association of Health Data Organizations, AHA, National Uniform Billing Committee, National Uniform Claims Committee, Public Health Data Standards Consortium, and a link to the Health Care Services Data Reporting Guide). Initially, the Contractor shall need to inform Partners about the Web page and encourage Partners to use it as a resource. Periodically, but at least annually, the Contractor should evaluate its use by Partners, obtain Partner feedback on the Web page, particularly its overall usefulness (are Partners using it), and ways that it can be improved.

C.18.3. Needs Assessment

An annual assessment of the HCUP Partners' needs and priorities for technical support is needed to prioritize the activities conducted under the Improving HCUP Data through Technical Support for Partners task. This assessment should be based largely on information gathered through the communication channels described in section C.18.2 above, such as LISTSERV discussions, workgroup input, and annual HCUP Partner and NAHDO meetings. Other relevant sources of HCUP Partner need should also be consulted, including reports and activities conducted in other tasks in this contract (e.g., recruitment of Partners, MOA negotiations) or suggested by the Project Officer.

This needs assessment will consist of a list of products, activities or areas of support identified as priorities for Partners to improve their data collection or use of data. Each item in the list should be supported by text describing the product or technical support activity and potential use and benefit to Partners. As directed by AHRQ, the needs assessment will be used to set priorities for technical support activities for the year.

C.18.4. Advice to Individual HCUP Partners

The Contractor shall have a central resource to provide technical support to individual HCUP Partners through the steps listed below. AHRQ expects that this technical support will be limited to the HCUP Partners only.

- Receive requests for assistance by phone, email, or AHRQ referral from HCUP Partners
- Provide guidance on inpatient and outpatient data development, collection, improvements, application for policy-relevant analyses, and data standards
- Offer and promote technical assistance to HCUP Partners through the HCUP Partner LISTSERV
- Redirect HCUP Partners to other resources where appropriate. Depending on the
 needs of the Partner, this could include, but is not limited to, such sources as other
 Partners, the National Uniform Billing Committee (NUBC), Public Health Data Standards
 Consortium (PHDSC), AHA, and Centers for Medicare and Medicaid Services (CMS)
- Develop and maintain Frequently Asked Questions (FAQs)
- Collect and report to AHRQ ideas and requests for improvements for the Technical Support for Partners task and/or the HCUP products overall
- Secure voluntary feedback from those requesting technical assistance to assess the effectiveness of the service

The Contractor should assume a maximum of 15 simple inquiries per month (requiring approximately 30 minutes of assistance each) and 5 complex inquiries per month (requiring approximately two hours of assistance each) for a total of 250 simple and complex inquiries per year. The Technical Support for Partners quarterly report should include a description of the types of support provided, including topic areas and Partner organizations receiving support.

C.18.5. Custom Data Analysis for Individual HCUP Partners

As directed by the Project Officer, the Contractor shall analyze HCUP data to develop special statistical tables that have been requested by individual HCUP Partners. Any tables that may be relevant to a wider group of HCUP Partners will be posted to the HCUP Partners' page, as

directed by the Project Officer. It is anticipated that this subtask will require about 4 days per month, with about one-third for senior-level staff to oversee the analysis and the remainder for mid-level or junior programming and clerical support. The Contractor shall provide a summary of requests for custom tables in the Technical Support for Partners quarterly report. This summary will provide a description of the request and the purpose for which the Partner organization needs the custom table.

C.18.6. Partnering with Data Organizations to Determine Solutions to Permit the Inclusion of Variables in their Datasets

Many participating data organizations have made minor or even major changes in their data release policies in response to heightened security and privacy concerns following the implementation of the HIPAA Privacy Rule. It is possible that a few changes of this type will continue over the course of this contract. Some changes in data release policies have been accommodated by additional language or modifications in the HCUP MOAs. However, some require more complex solutions. An important goal for HCUP is to work with participating data organizations to meet their needs for data protection, however; inclusion of key data elements in externally-released databases and derivative products is critical to regional representation and to support a variety of healthcare analyses, including the NHQR/DR.

The Contractor shall provide support for HCUP and Partner organizations to determine data solutions that permit inclusion of their data and critical data elements while protecting the confidentiality of the data. The Contractor shall maintain capacity to explore data issues with AHRQ staff and appropriate staff at data organizations. The task includes dialogue about options for including data and critical data elements, one or two conference calls, and could require statistical expertise. The Contractor shall then formulate a brief options paper, which will include necessary analyses to determine an approach for protection of patient confidentiality while retaining critical data elements needed for research. Working with the data organization, HCUP will provide guidance on which options to pursue and the Contractor shall then provide support and analyses. The Contractor should anticipate no more than two of these evaluations each data year; one evaluation to be less complex in nature, and one more complex in nature.

C.18.7. Products for Partners to Develop and Improve Data Collection

Based on the needs assessment, and as directed by AHRQ, the Contractor shall develop various types of products to provide assistance to Partners on data collection issues.

C.18.7.1. Educational Briefs

The Contractor shall develop brief educational text (1-2 pages) each month focused on a specific topic area related to data collection issues. It is likely, given HCUP Partners' current interest and need for information that these educational pieces will initially focus on data standards, issues on the electronic healthcare record and health information technology, and development of outpatient databases. These materials would be disseminated via the HCUP Partner LISTSERV to foster education and stimulate discussion and will be archived on the HCUP-US Partner Web page. The topics for the educational materials will be chosen in consultation with the Project Officer. Educational briefs should be posted on HCUP-US Partner page. Brief descriptions of these educational pieces should be included in the Technical Support for Partners quarterly report.

C.18.7.2. Special Report on the Collection and Improvement of Encounter-Level Data

In years 2 and 4 of the contract, the Contractor shall develop a report focusing on a specific area of data collection. The report topic will be selected based on the needs assessment produced in task C.18.3 and AHRQ priorities. The topic will likely be related to improving data that is already widely collected or on newly emerging data collection efforts such as outpatient databases or the enhancement of the clinical content of statewide databases.

The report will be written as a technical assistance tool for the HCUP Partners to improve their data collection efforts. Developing information for the report may include a number of activities such as a literature review, individual conversations with HCUP Partners and other experts, input from an HCUP workgroup, or statistical analyses of HCUP data. The approach for developing the report will depend on the topic chosen and Partner needs.

The Contractor shall provide the Project Officer with a description of the planned approach to develop the report including an outline of the report. The Contractor shall begin work on the report after the plan for the report is approved by the Project Officer. The Contractor shall provide a draft of the report for AHRQ review and then revise the draft based on AHRQ feedback. This draft will be provided to HCUP Partners (all Partners or a specified subset, as directed by the Project Officer) for their feedback. A final version of the report will be developed after receiving Partner input.

The Contractor should assume that the two reports will be similar in scope and effort to the following two reports in the HCUP Methods series: <u>Emergency Department Data Evaluation</u> and <u>HCUP E-Code Evaluation Report</u>.

C.18.7.3. Summaries of Data Standards and Health Information Technology Meetings

To provide technical assistance to HCUP Partners on data standards and health information technology (HIT) issues, the Contractor shall prepare for, attend and participate in data standards and HIT meetings of relevance to the data collection efforts of HCUP Partners. Examples of such meetings include ANSI X12N, HL-7, National Uniform Billing Committee, and Public Health Data Standards Consortium. The Contractor shall develop a summary of each meeting attended focusing on issues of particular relevance to AHRQ and HCUP Partners. The summary will be posted on the Partners' LISTSERV and the HCUP-US Partner Web page. Brief descriptions of the summaries should be included in the Technical Assistance for HCUP Partners quarterly memo. This task will support staff time and travel expenses to 6 meetings per year that take place around the country.

C.18.8. Products for Partners to Improve the Use of Data

For Year 1 of the contract, create one reporting tool or template as described in section C.18.1 at the direction of the Project Officer. For budgeting purposes, the tool should require minimal effort building on existing knowledge and be of similar scope and effort as the *AHRQ Disparities Assessment Tool* http://www.ahrq.gov/fund/contarchive/rfp060009.htm and be of similar scope and effort as the *Facilitating knowledge transfer and utilization of regional bioterrorism preparedness workbook* created under AHRQ's Integrated Delivery System Research Network (IDSRN) (Contract #290-00-0018, Task Order #9).

For Years 2-5 of the contract, the Contractor should develop an annual list of potential tools and templates that use inpatient and/or outpatient data, based on responses to the needs

assessment outlined in section C.18.3. This list should include a brief description of each tool, the rationale for doing the tool, the potential audience for the tool, and summary recommendations on the priority of the tools. With the Project Officer's approval, create up to two products that could be used to answer high priority Partner questions using inpatient and/or outpatient data. The Contractor should assume that this task will entail the annual development of two products that require minimal effort in terms of time and money (as described above) or one product that requires moderate effort in terms of time and money. A template or tool of moderate effort should be similar in scope and effort to *Planning Guide for Community-based Mass Prophylaxis* at http://www.ahrq.gov/research/cpmprophyl/cbmpro.htm, or *Reopening Shuttered Hospitals to Expand Surge Capacity* http://www.ahrq.gov/research/shuttered/. The Contractor should give consideration to the fact that some products require maintenance and revisions, and the frequency of those revisions. Revisions would be in addition to a new tool or template. The Contractor should give consideration to the fact that some products require maintenance and revisions, and the frequency of those revisions. Revisions would take the place of a new tool or template.

For all tools and templates, the Contractor shall develop a draft product(s) for comment by AHRQ and a final product(s) to be posted on the Partner Web page. The Contractor is expected to communicate with Partners about the release of the product(s) and provide electronic training on the product(s), as needed.

C.19. PROVIDE TECHNICAL SUPPORT TO AHRQ

Provide periodic technical support in several main areas to AHRQ staff, or to other Contractors working under the direction of AHRQ staff (e.g., on research studies and other programming tasks). The types of technical assistance anticipated under this contract include those specified below. It is anticipated that activities C.19.1 and C.19.2 will involve a total of five staff days per month combined.

C.19.1. Provide Technical Assistance in Understanding and Use of Data and Documentation System

Provide ad-hoc technical assistance to AHRQ staff and other AHRQ Contractor staff to facilitate understanding and using the databases and documentation created under this contract. Assistance includes such activities as answering questions about the details of how a database or data element was created, answering questions about the data that arise when unexpected findings occur, providing statistical advice, and providing help in finding a specific type of information in the documentation system. It may also include providing some statistical programming code to facilitate use of the data and statistical table development to better understand data anomalies.

Examples of previous assistance provided under this task include:

- Contractor provided the number of children's hospitals and beds included in each state in the KID then compared that number to what AHA has for all children's hospitals in the same states.
- Contractor evaluated the Physicians' Current Procedural Terminology (CPT) modifier codes in five states.

C.19.2. Provide Information to AHRQ on General Technological Innovations Affecting HCUP Data Processing

Provide information to the Project Officer about technological innovations that could make data processing more efficient, improve access to data and information, and improve the quality of the products. In order to keep abreast of such innovations, it is expected that two of the Contractor staff will annually attend two professional meetings specifically aimed at computer hardware and software advances, Internet and web-based applications and technologies, and programming/data processing. Annually, the Contractor shall prepare a memo to the Project Officer describing technological innovations that may be useful for HCUP to adopt within the next year or two.

C.19.3. Provide Information to AHRQ on Advances in Health Care Information Technology (HIT) Relevant to HCUP

Task C.19.3 is an Option.

Assist AHRQ staff in keeping up-to-date on advances in HIT that impact or are relevant to HCUP and the future of healthcare encounter data (inpatient, outpatient, and non-hospital) for research and policy analyses. In general, it differs from task C.19.2 by looking farther into the future of health care data beyond the near term (one to two years) processing and analytic needs of HCUP that are the focus of task C.19.2.

The last few years have seen increased attention in the US on development of the electronic health record (EHR), the National Healthcare Information Network (NHIN) and Regional Health Information Organizations (RHIOs), and electronic transmission of health care data, including health care claims and claims attachments. Simultaneously, there have been increasing calls for more clinical data in healthcare encounter data sets and timelier encounter data. HCUP plans to be forward-looking in terms of opportunities that lie ahead from the advances in health information technology (HIT) to improve the timeliness, accuracy and analytic capabilities of its databases. The Contractor shall assist AHRQ staff by tracking developments and providing staff with written summaries concerning HIT activities and developments that are related to the development and analyses of health care encounter data. The HIT areas to be covered will be somewhat wide-ranging, from the hardware and software advances for electronic transmission of data, to specific program/business activities implementing HIT advances, to specific issues related to RHIOs, EHRs, NHIN, claims attachments and other mechanisms to enhance the clinical content of the data collected by HCUP Partners and HCUP and to expand the scope of the health care encounter data collection to non-hospital settings.

The Contractor shall provide a written two-page summary of one HIT development/activity each month focusing on issues and details of relevance to HCUP data development and research. These summaries will be for HCUP Staff. It is anticipated that about half will also be of relevance to HCUP Partners and placed on the Partner section of HCUP-US. Periodically, as specified by the Project Officer, the Contractor shall also provide AHRQ with a list of topics for future monthly summaries from which AHRQ will designate summary topics for subsequent months. The Contractor should anticipate three (3) staff days per month to track current HIT activities and developments, examine one topic in depth for the monthly two-page summary, and for a one-hour monthly conference call with AHRQ staff. The Contractor shall also attend two HIT conference during the year and provide a written summary of information presented at the conference that is relevant to HCUP.

In addition, the Contractor shall develop an annual report that summarizes the HIT advances and activities of relevance to HCUP. For the most part, the highlights will be based on the monthly summaries. The annual report will also provide an in-depth look at one HIT activity or advance. The topic for this in-depth examination will be determined in consultation with the Project Officer. It is anticipated that the annual report will be about 10 to 15 pages, half of which will be the summary of HIT advances and activities, and half a focus on one HIT advance or activity. The audience for the report will be AHRQ and the HCUP Partners. The Contractor shall provide a draft of the report for AHRQ review one month prior to the deliverable due date.

C.20. PROVIDE TECHNICAL SUPPORT TO HCUP USERS

The Contractor shall create and maintain an infrastructure to provide technical support to users and potential users of HCUP databases, software tools, linkable files, written reports, HCUPnet, database and software documentation and all other products developed for the HCUP project. Technical Support provides a bridge between HCUP and its users and potential users and is intended to respond to and meet users' needs for assistance with or advice on HCUP data and products. The objective of the assistance is to increase the usefulness and use of HCUP data and products, and of administrative data in general. Technical support is provided to both purchasers and prospective purchasers of HCUP databases, and to anyone interested in learning about the project, its data and its products. Recipients of technical support include Researchers, HCUP Partners, HCUP team members, other AHRQ staff, Federal government, state and local government, media, universities, research organizations and many other constituent groups. Methods for providing technical support include: 1) explanations and methods for using HCUP databases, software tools, linkable files and HCUPnet, 2) identification of relevant written HCUP reports, 3) explanations of ordering procedures and requirements for HCUP databases, and methods of acquiring other HCUP products, and 4) use of HCUPnet and special programmed data runs for select constituents.

Users of HCUP data, software tools and products are health services researchers, policy analysts, decision makers and other constituent groups. They have backgrounds in economics and other social sciences, public health, medicine and other fields. They represent a variety of sectors, including academia, private industry, the media, and government. The Contractor must be able to work with these varied constituents, understand their questions, problems, and demands, and be able to investigate and communicate solutions to them.

Technical support also requires the Contractor to track usage, follow-up with selected users to ascertain their feedback to improve the project, and maintain a database with user information and statistics.

C.20.1. Develop Staff and Infrastructure for Technical Support Services

C.20.1.1. Develop HCUP Expertise

Contractor staff providing Technical Support shall have sufficient knowledge to communicate with HCUP users and respond to questions about HCUP within one month of the start date of the contract. Sufficient knowledge requires the ability to address inquires with basic information about HCUP. More thorough knowledge should be acquired by the third month of the contract, at which time contract staff will have the ability to respond to more complicated inquiries.

For assistance in learning about previous practices in providing Technical Support, the Contractor shall receive existing technical support materials to use as prototypes in maintaining or developing their own apparatus and mechanisms. These materials include a 10-page procedure manual on Technical Support to serve as a guide, and a log of user questions and Contractor answers from the past year to serve as a prototype of technical support inquiries and responses. In addition, the Contractor can receive up to 10 days of technical support consultation from the previous HCUP Contractor. This consultation will include a briefing that explains the technical support function and an explanation of its setup and status. However, the new Contractor is responsible for establishing its own operations and procedures in providing Technical Support and may modify the past Contractor approach.

Contractor staff shall develop their HCUP knowledge through additional focused efforts to learn about the project as well as thorough on-the-job learning. It is expected that the technical assistance staff will gain knowledge and experience with HCUP data and research and will apply that knowledge to inform users and project development. For example, use of HCUP data and tools for a research analysis provides in depth knowledge which can be transferred to users. The research experience and dialogue with users can be used to provide suggestions for improvements or expansion of HCUP data and tools. Focused efforts to develop HCUP knowledge include:

- Becoming thoroughly familiar with the HCUP-US Web site
- Review of key HCUP reports and database documentation
- Attending HCUP presentations given by AHRQ staff
- Reviewing HCUP presentations and training materials
- Discussions with AHRQ staff.

C.20.1.2. Establish Systems to Respond to and Monitor Inquiries

C.20.1.2.1. Telephone and E-mail

The Contractor shall maintain a toll-free telephone number as a call-in help line and shall maintain a dedicated e-mail address. The majority of technical assistance will be provided via e-mail. For requests coming by e-mail, a return e-mail shall be automatically generated with a message that states that their question will be answered within three business days or sooner for simpler requests. Questions submitted via e-mail that are more easily answered in person-to-person conversation, should be responded to by telephone.

The Contractor shall operationalize and staff the technical assistance toll-free telephone number and e-mail address within one month of the start date of the contract. Until then, the Contractor shall set up a toll-free number and e-mail address that provide the user with an announcement that these contact methods are under construction, and providing alternative contact information. When the technical assistance toll-free telephone number and e-mail address are fully operational, AHRQ will forward Technical Support and assistance e-mails and calls to the Contractor.

Telephones should be answered 24/7 with a voicemail message briefly introducing HCUP Technical Support, providing referral to the HCUP-US Web site and giving the option of using email, followed by a request for their contact information and specifics about the help needed and a promise of a return call within three business days.

C.20.1.2.2. Routing Protocol

The Contractor shall develop and maintain routing protocol for ensuring that technical assistance inquiries are routed to the appropriate contract staff. Routing protocol will include criteria for inquiries that require notification of AHRQ staff, e.g., priority users (non-HCUP AHRQ staff, Congressional offices, Partners, Federal government agencies, the media, and strategic organizations) (see Section C.20.2.2). The Contractor shall provide AHRQ with a list of key Contractor personnel proposed to staff the technical support inquiries by level of help required for an inquiry. The list should briefly explain the staffers' relevant capabilities and their response roles. The technical support staff and routing protocol require AHRQ approval prior to implementation. Both are due to AHRQ by the end of the second month of the contract. Both should be revised when there are changes in personnel or routing procedures, and resubmitted to AHRQ for approval.

C.20.1.2.3. Contractor Staffing Responsibilities

The Contractor's senior research staff shall provide oversight and leadership to all technical support responses. Routine questions about HCUP can be handled by mid-level Technical Support staff with relevant technical backgrounds, which are knowledgeable about HCUP. Sophisticated questions about HCUP (e.g., the appropriate use of HCUP, the advisability of using a particular HCUP dataset for a particular research question, etc.) should be referred to and handled by experienced mid-level and senior-level Technical Support staff with relevant technical and analytic backgrounds who have specialized HCUP expertise. Questions from priority audiences and public users with high-profile work (see Section C.20.2.2 and C.20.2.1) require consultation with AHRQ prior to responding.

C.20.2. Provide Technical Support to HCUP Users

C.20.2.1. Provide Assistance to Public Users

The Contractor shall receive, analyze, respond and track technical assistance requests that come from the public. The requests will come by e-mail and telephone, directly from the user, or routed through or referred from AHRQ staff.

Based on past experience the Contractor can expect technical assistance to include the following types of activities:

- Guidance on using HCUP and directing users to database documentation
- Guidance on selecting and obtaining an appropriate data base
- Guidance on selecting and using a HCUP tool, and how to access or obtain the tool
- Help troubleshooting software problems
- Investigating potential data errors and potential errors with documentation
- Guidance on navigating the HCUP Web site http://www.hcup-us.ahrq.gov/
- Guidance on use of the HCUPnet Web site http://hcup.ahrq.gov/hcupnet.asp
- Guidance on programming issues
- Help in interpreting output
- Answers to questions about appropriate use and reporting of data analyses

Technical assistance to public users should not include the task of providing any actual programming services, study designs, complex analyses, or running, revising or customizing software tools.

When appropriate, the Contractor shall redirect users to other resources. Depending on the needs of the user, this could include such sources as the American Hospital Association, the National Center for Health Statistics, the Centers for Medicare and Medicaid, the American Hospital Association, the Area Resource File, and the Bureau of the Census. The Contractor shall be familiar with these and other relevant health research data resources.

The total expected volume of assistance requests in Tasks C.20.2.2 and C.20.2.1 is approximately 1,500 in Year 1 (125 per month times 12 months), and rising proportionately by 10 percent each year, to 2,200 in Year 5. Assume a mix of simple inquiries, requiring approximately 15 minutes of assistance each, and complex inquiries (requiring approximately 1 hour of assistance each). Additionally, assume that 75 percent of the responses will require simple answers, and 25 percent will need complex solutions.

C.20.2.2. Provide Assistance for Special Requests for Priority Audiences

The Contractor shall provide assistance in responding to special requests for HCUP information from priority audiences, as directed by the Project Officer. The audiences will usually be AHRQ staff that are not part of the HCUP team, Congressional offices, Federal government agencies, the media, Partners, and prominent organizations. The Contractor shall alert the HCUP team for assistance in designating these inquiries as high priorities and respond quickly. The responses may require generation and explanation of special statistical tables and other aggregate data, assistance with study designs, data analysis, and use of software tools. AHRQ staff may also be involved in the response.

It is anticipated that the Task C.20.2.2 requires approximately four Contractor staff days per month, with about one-third for senior-level staff to oversee the analysis and the remainder for mid-level or junior programming, technical, and clerical support.

C.20.3. Monitor Technical Support Services

C.20.3.1. Log Technical Support Inquiries

The Contractor shall log all technical support inquiries into a user database or other electronic system for tracking purposes as described in Section C.20.6. Inquiries that require follow-up for impact analysis and those from priority audiences should be flagged. The database or tracking system should include the following types of information on each technical assistance request: date of request, date the assistance was provided, the organization, contact information, HCUP product, a summary of the request including the reason the requestor needs the information or assistance, and a description of the information or assistance provided. The database or tracking system should have the capability of being sorted by organization name and date and the capability of searching on key words (for topics on which assistance was provided). Outcomes of the follow-up will also be entered in the user database. The tracking system should be updated within five working days of the completion of a technical assistance request performed under task 17.4 or receipt of a technical assistance description from AHRQ.

C.20.3.2. Monitor Potential Impact from Technical Support Assistance

The Contractor, as directed by ARHQ, shall follow-up on technical assistance provided to users with high-profile, high-impact, or resource-intensive work at selected appropriate time intervals to determine the outcome of the information provided to them, to ascertain any use and impact HCUP had, such as, used for decision making purposes, presentations in published reports or articles, or effect on policy, etc. Information on the use and impact it had, if any, shall be flagged for follow up in the user database or for potential development of an Impact Story (see Section C.20.4.2).

C.20.3.3. Develop Standardized Responses and Limited Statistics

The Contractor shall compile and use an electronic collection of "best responses" to routine technical assistance inquiries, and update them on a regular basis, as improvements and variations to the response become apparent.

The Contractor shall develop a limited number of statistical tables with frequently requested HCUP data, distributions, or cross-tabulations to facilitate responses for this information.

C.20.3.4. Maintain and Update Technical Assistance Web Pages

The Contractor shall maintain and update the technical assistance Web pages of the HCUP Technical Support Web site, www.hcup-us.ahrq.gov/techassist.jsp, and create and construct new Web pages to communicate relevant and accurate technical assistance information for users. These pages, which will be for public access, will provide guidance on the types of Technical Support provided and not provided, expected response time, how to locate technical documentation, and other helpful information. Technical assistance Web pages will include a section with frequently asked questions and/or an index, and a search capability. The Contractor shall provide AHRQ with recommendations on content and format for new technical assistance Web pages, and suggestions for improving existing Web pages. With AHRQ approval, the Contractor shall implement Web site changes. The Contractor shall maintain and update the technical assistance Web pages as needed for provision of accurate information to the public. Web page development should be delivered in a format compatible with both the AHRQ Web site and the HCUP-US Web site, and adhere to Federal government and HHS standards, including Section 508 compliance. Technical assistance Web pages should be coordinated with the HCUP-US Web site described in Section C.17.

C.20.3.5. Use Technology for Outreach to HCUP Users

In Year 3, the Contractor shall do a small feasibility study to assess the usefulness of employing a new technological application for assisting users with their technical support needs. This assessment should include evaluating the use of an interactive chat room style LISTSERV of HCUP users monitored by Contractor staff. It should also include an assessment of an online user forum where users can log on, post questions and comments, and receive answers directly from each, without Contractor staff involvement.

For all computer-based help options examined, the Contractor shall provide examples of effective sites that use these technology applications, and provide pros and cons of their use for HCUP. The Contractor shall recommend the technological approaches that they believe are optimal for AHRQ to employ. With AHRQ approval, the Contractor shall implement and maintain a new technology to augment the current methods of providing Technical Support.

C.20.4. Improve and Demonstrate HCUP Value through User Feedback

Contact with users during the course of providing technical support can help not just the user, but can yield important information that could benefit the HCUP project.

C.20.4.1. Encourage and Document Suggestions from Users

In the course of providing assistance to knowledgeable HCUP users, the Contractor shall elicit and document their suggestions for improvement of or enhancement of HCUP data, tools, reports and technical support. Such feedback would include ideas for bettering existing HCUP products, developing new products in the future, improving the dissemination of HCUP information, and targeting special groups who would benefit from knowing more about HCUP. Possible changes to improve technical support may include developing clarifying materials to post on the HCUP-US Web site (www.hcup-us.ahrq.gov/home.jsp), recommending new tools or instructions to help users, or developing user groups to share ideas.

The Contractor shall document user suggestions, analyze them and communicate them to AHRQ. User suggestions should be logged in the user database described in Section C.20.6. The suggestions should be flagged and provided as technical support feedback in the quarterly Technical Support and Outreach Statistics Report to AHRQ described in Section C.20.7.

C.20.4.2. Develop Impact Stories on the Value of HCUP Products

The Contractor shall develop stories of users for whom use of HCUP has made a tangible difference. The story should describe how individuals or organizations have utilized HCUP databases, software tools, reports, or research results, and should demonstrate the impact that resulted from their use. Priority interest should be given to stories that involve improvement of quality and/or safety, better access to health care, or greater efficiency. The Contractor shall identify potential user leads from technical assistance inquiries and the user feedback task, information collected during conference presentations, and from exhibit booth activities. Information about possible user impact stories may also come from AHRQ.

Users should be entered in the user database described in Section C.20.6. Those who are potential targets for stories should be flagged in the user database and evaluated for later contact. It is expected that up to three contacts will need to be interviewed per period to develop one lead story.

The Contractor shall contact the user and gain permission to use the information. The Contractor shall obtain the necessary details and develop the story to be suitable for dissemination to a broad audience.

C.20.5. Demonstrate HCUP Value through Other Means

C.20.5.1. Locate and Review HCUP Publications

The Contractor shall search for and maintain a collection of HCUP publications -- published articles and reports that use or address HCUP data, software tools and other HCUP products. The Contractor shall employ a systematic approach to locating these publications. The Search terms used under the previous contract to find publications that reference HCUP will be provided to the Contractor by AHRQ. In Year 2, the Contractor shall test and modify the list of

search terms and construct methods to find references to HCUP in publications. Articles are published in peer-reviewed journals, professional forums, newspapers, and magazines. Reports are published by Federal government agencies (e.g., GAO), state governments, healthcare organizations (e.g., Blue Cross), etc.

The Contractor shall scan each publication to provide a brief review. The publication review should identify any obvious errors in use or citation of HCUP. Errors such as 1) obvious methodological errors (e.g., weights were not applied to obtain national estimates), 2) incorrect citations/references, and inappropriate use of the data, 3) errors citing / referencing the database or product, and 4) inappropriate use, should be noted in the publications report.

The Contractor shall generate summary statistics on the numbers of publications by HCUP product and publication type (journal article, report, etc.) for the quarterly Technical Support and Outreach Statistics Report described in Section C.20.7. It should include current and trend statistics on publications by HCUP product (for each quarter of current year and for previous years). With the approval of AHRQ, the Contractor shall send to HCUP Partners hard copies of important publications that are relevant to their specific SID, SASD, or SEDD state data.

The Contractor shall develop a separate Publications Report with more complete and detailed information on publications using HCUP. The report shall list all publications generated over the past quarter. Publications that use or cite HCUP wrongly should be flagged and coded with the appropriate error category. Past volume of publications was 51 new publications in 2003; and 71 new publications in each of 2004 and 2005. The Publications Report will include:

- Executive summary
- Highlights
- Full list of publications sorted by HCUP database or tool, including authors, dates, citations, Web link, HCUP product referenced, and a short summary of the content.
- An Appendix with hard copies of each publication

C.20.6. Maintain a User Database

The Contractor shall maintain an electronic database with information on user inquiries and technical support provided and usage of HCUP. The Contractor shall receive the user database currently in existence for HCUP that uses customer relationship management software developed under the previous contract. For the first year of the contract, the Contractor shall maintain the present system. The Contractor shall assess the feasibility and cost-benefit of expanding the existing system and of selecting or creating a new electronic system to add desired items and/or capabilities not in the current system. With AHRQ approval, the Contractor shall implement a new or revised database on users, uses and impacts of HCUP. If implemented, the system should be operational by the end of the first quarter of the second year of the contract.

Maintaining a user database of information has four major purposes:

 Document usage of technical support and HCUP products in order to provide statistics on current Technical Support activities and HCUP product use for future planning and development decisions for the project. The tracking will also help fulfill required AHRQ reporting needs, for example, the Government Performance and Results Act (GPRA).

- 2. Document user suggestions and assessments of how the HCUP project could be improved.
- 3. Follow up with select strategic users to assess the value and impact of HCUP products.
- 4. Track impacts from HCUP use, such as reports published using HCUP, and policies developed as a result of using HCUP products.

The information to be kept in the database includes user (as allowed by Government privacy regulations), user affiliation (university, government agency, research organization, etc.), HCUP product (identify the database, software tool, report, etc), issue addressed, method of contact, level of response effort, and when obtainable, the purpose of their use of HCUP and any resultant outcomes or actions that result from it. Technical assistance requests that were resource-intensive should be flagged.

The Contractor shall flag inquiries for special requests from priority audiences and from public users who have high-profile or high-impact work. These entries should be followed up, with outcomes entered in the user database (see Section C.20.2.2 and C.20.2.1).

Records shall be kept for the maximum time allowed by Government record keeping requirements. Allowable information should be kept for the duration of the contract, for use in look backs and trend analyses.

The database should also serve as the source for information and statistics to be generated quarterly in Technical Support and Outreach Statistics Reports and other special reports for management purposes (Described in Section C.20.7). The information in the user database shall be set up so that information can be sorted by user or user's organization, date, HCUP product category, assistance provided, outcome, and other important variables. The system shall have the capability of being searched by keywords. The user database shall be kept up-to-date, with information entered promptly to allow tracking the completion of technical assistance requests.

C.20.6.1. Track HCUP Web site Visits

The Contractor shall maintain records on visits to HCUP Web sites in the user database. There are three current principal Web sites: the HCUP Technical Support homepage (www.hcup-us.ahrq.gov), the HCUPnet home page (www.hcup.ahrq.gov.hcupnet.asp), and AHRQ's HCUP home page (www.ahrq.gov/data/hcup). The Contractor shall maintain WebTrends software or other Web analytic software, to track statistics on the number of visits to the Web site by domain type associated with users' internet provider (commercial, educational, government, etc). AHRQ will provide the Contractor with corresponding information on visits to the AHRQ HCUP Web page and HCUPnet. Web site statistics are included in the quarterly Technical Support and Outreach Statistics Reports.

C.20.6.2. Record Counts of Subscribers

The Contractor shall maintain counts in the user database of the number of subscribers to two web-based user lists: 1) the HCUP LISTSERV, which is e-mail notification list maintained on the AHRQ Web site, and 2) the HCUP mailing list, which is a postal address mailing list of people who contacted the HCUP Central Distributor for database purchases and support, who have not opted to be excluded from the list. AHRQ will provide the Contractor with a quarterly count of

active HCUP LISTSERV subscribers to include in the quarterly Technical Support and Outreach Statistics Report.

C.20.7. Provide AHRQ with Technical Support and Outreach Statistics Reports

The Contractor shall aggregate and summarize all Technical Support and information derived from the database of information on users and uses of HCUP products (see Section C.20.6), into a Technical Support and Outreach Statistics Report. This internal report will be provided to AHRQ quarterly per calendar year for management purposes. It will provide counts of user contacts by user affiliation, HCUP product that help is needed for, level of difficulty of inquiry, and method of contact, and other items deemed important by AHRQ or the Contractor. The counts are to be provided for each quarter in the calendar year and from one year earlier.

All outreach activities, presentations given, training sessions held, and booths staffed, shall also be included in the quarterly report for all events that took place in the previous quarter. The report should provide an explanation of the activity, a description of the content, audience, attendance, results, and any issues raised or suggestions for improvements to the HCUP products, and an opinion as to whether this activity, conference, meeting or session should be supported with a similar activity, presentation or HCUP presence in the future. Additional items to include are a list of attendees or participants with contact information, frequently asked questions, and names of staff involved. Information on the outcome and impact of the activity should also be included when known. This information shall also be aggregated and included in summary form in the Annual Report of HCUP Outreach Activities described in Section C.24.3.

The report shall include a short Executive Summary, and a Highlights section pointing out significant changes in usage statistics from earlier times, or interesting trends. Suggestions for changes to HCUP, presentations, materials or ideas of new HCUP products should be included.

In summary, the internal report will typically include:

- Executive Summary
- Highlights with summaries
- Number of HCUP database purchases by database by method of acquisition (purchase or complementary copy). (This information will be derived from the Central Distributor tracking system).
- Technical assistance counts handled by Contractor and by Central Distributor by HCUP product, topic of inquiry, user affiliation, method of contact and level of response effort
- Feedback comments and concerns about HCUP and its products
- Counts of HCUP-US Web site visits
- Number of subscriptions to HCUP web-based user lists (HCUP LISTSERV and Partner LISTSERV e-mail notification list and HCUP postal address mailing list)
- Publication counts using HCUP products by HCUP product and type of publication
- Outreach interventions
- Impact of use of HCUP through technical support assistance
- Impact on use of HCUP through outreach activities
- Trend analysis by quarter, year to date and in comparison to previous year

C.21. DEVELOP EDUCATIONAL PRESENTATIONS AND TRAINING MATERIALS

Task C.21- C.21.6.2 is an Option.

AHRQ uses educational presentations to increase knowledge and training about HCUP, its databases, software tools, and products among health services researchers, policy analysts and decision makers. AHRQ has two types of presentations currently in use for the HCUP project. The first type, expository presentations were developed to describe HCUP to audiences. The length of the presentation, the targeted audience and the delivery venue determine the content. Shorter presentations are cursory overviews of HCUP. Longer presentations are a full description of HCUP, including databases and their development, software tools and their applications, reports and their utility. The second type, technical training presentations, was developed to teach audiences how to use HCUP databases, software tools, and other tools to advance their research. Technical training presentations demonstrate actual research applications, applications of software tools and data runs. They usually incorporate hands-on learning experiences for users. All presentations require knowledge of the technical aspects of HCUP. Presentations must also follow AHRQ Office of Communications and Knowledge Transfer (OCKT) format guidelines.

These two types of presentations have been developed to be presented either 1) in-person with or without transmitting through an electronic medium, or 2) through electronic courseware. With the in-person presentation alternative, the presentation will typically be a PowerPoint slide show presented by either AHRQ staff or Contractor technical staff, to an audience at a conference or workshop setting. On occasion, the in-person presentation requires the audience to use computers for training. The in-person presentation may also be delivered as a web cast or webinar. A web cast is similar to a <u>broadcast television program</u> but designed for <u>internet</u> transmission, and transmits information in one direction only. In contrast, a webinar is designed to be interactive between the presenter and audience. With a webinar, a user can type in or call in questions or comments that the presenter can address at the meeting. A web cast and a webinar are 'live' in the sense that information is conveyed according to an agenda in real time, with a starting and ending time.

With electronic courseware, users typically access and use this form of training independently without direct involvement from HCUP or Contractor staff, and at their own convenience and schedule.

C.21.1. Update Existing Presentation Masters

The Contractor shall update each existing presentation master annually to make it accurate with regard to the current status of the HCUP project. Existing presentations are shown in Table 7 by type of presentation and type of delivery. The changes involve updating numbers, dates, products and other regularly changing information that is in the presentation. All six existing presentations shall be updated annually.

Table 7 EXISTING EDUCATIONAL PRESENTATION MASTERS							
Requiring In-Person Delivery (live person) Requiring Electronic Delivery (courseware)					(courseware)		
Presentation Description	Targeted Audience	Delivery Venue	Presentation Description	Targeted Audience	Delivery Venue		
	HCUP Expository Presentations						
45 – 60 minute HCUP overview	Policy and Decision Makers (non- primary data users)	AHRQ National Advisory Council, HHS Data Council, GAO, OMB					
90 minute HCUP data, tools and research products overview	Potential HCUP Researchers, Policy and Decision Makers	National meetings e.g., Academy Health, HCUP Partners	90 minute HCUP data, tools and research products overview	Researchers, Policy and Decision Makers new to HCUP	HCUP-US Web site or CD		
6 hour (full day) HCUP training with pre-course and methods seminars Suitable to be broken into 2 – 3 hour sessions	New HCUP Researchers	National meetings e.g., Academy Health, APHA, SGIM					
	HC	UP Technical Tra	aining Presentatio	ns			
3 90-minute segments electronic Web cast	Intermediate/ Advanced HCUP Researchers	National organization's Web sites					
6 hour (full day) "hands- on" training on methods of using HCUP for analyses with computer set ups	Intermediate/ Advanced HCUP Researchers	National meetings e.g., Academy Health, SGIM, AHRQ Seminars					

C.21.2. Create and Update New Presentation Masters

AHRQ will use new presentations (including electronic courseware) to reach new target audiences and new delivery venues. As with existing presentations, new ones will be presented either by 1) in-person, or 2) through interactive electronic courseware. New presentations may also be delivered by a live person with modified electronic courseware, in a "student-faculty" training session.

Once developed, the new presentations will also be updated annually to make them accurate with regard to the current status of the HCUP project. Additionally, if factual updates are required in between annual updates, those minor edits should be made on a continuous basis. For example, if the number of Partners changes, the master should be edited to stay current so that the master can be used throughout the year as the foundation for specific presentations. These edits are expected to be very minor and consist only of factual edits.

The Contractor shall assess the merit of presentations after they have been delivered and recommend in a written memo ways to improve the presentations by modifying their design, organization and content. The Contractor shall suggest modifications based on the usefulness of individual presentations and how the presentations fit together as a whole in fulfilling user needs. With AHRQ approval, the Contractor shall annually modify selected existing masters to improve their content, structure and presentation format.

Limited professional graphic and design support will usually be required for development of new presentation materials.

The Contractor shall deliver initial, intermediate and final drafts of all presentations. Each draft requires AHRQ approval.

C.21.2.1. Create HCUP Training File

In Year 1, the Contractor shall create a HCUP de-identified mock file for training purposes only, extracted from the NIS. This extraction will be called the "de-identified training file". The de-identified training file will be created so that there will be no risk of individual hospital disclosure, and no risk of being used for a real analysis. The term "de-identified" means that information considered to be protected health information (PHI), as defined under the HIPAA Privacy Rule will be removed. For training purposes, the file will need to have similarities to the NIS and contain the same types of data elements; however, all actual information should be altered in a way to render it useless for research, i.e., fake. No more than 100,000 observations will be included in the mock file. Documentation similar to the NIS will be included with delivery of the file. The Contractor shall make available 250 copies of the mock file and documentation on CD with warnings that clearly notify users that the data is "not real" and cannot be used for research or aggregate statistical reporting. No data use agreement will be required for use of the de-identified training file. (See Table 8.)

C.21.2.2. Create 3-Part Intermediate/Advanced Level Electronic Courseware

In Year 3, the Contractor shall conceptualize and develop a three part, electronic training course (See Table 8.) under HCUP Technical Training Presentations). Each part should be approximately 90 minutes long and should be based on the existing 90-minute segments already developed as a presenter-led Web cast. The courseware should be geared to an intermediate or advanced level HCUP user who is at a masters or post-graduate level, and should be designed to follow the existing 90 minute stand-alone electronic overview. The new training course should provide health services researchers with in-depth knowledge of how to use HCUP databases, software tools and products and documentation to conduct their analyses. The users will access the training electronically from the HCUP-US Web site and/or a CD. Their training will be independent and self-guided, and available to them 24/7. The courseware shall be updated annually to reflect changes in HCUP facts.

Limited professional graphic and design support will be required for development of electronic courseware materials. Services from a firm specializing in computer based training may be desirable.

C.21.2.3. Assess and Apply New Technologies for Training

In Year 4, the Contractor shall assess current technologies used for electronic training, and in a short report, make recommendations to AHRQ on new electronic mediums or approaches to use for training purposes. Based on AHRQ preferences, the Contractor shall create a new electronic teaching tool in Year 5. The tool shall be used on the HCUP-US Web site or CD or another medium using appropriate technology of that time (See Table 8 "Teaching tool TBD based on current technology" under HCUP Technical Training Presentations).

Professional graphic and design support may be required for development of electronic training tool.

Table 8							
NEW EDUCATIONAL PRESENTATION MASTERS							
Requiring in-F	Requiring in-Person Delivery (live person)			Requiring Electronic Delivery (courseware)			
Presentation	Targeted	Delivery	Presentation	Targeted Audience	Delivery		
Description	Audience	Venue	Description	-	Venue		
	HCUP Technical Training Presentations						
HCUP De- identified training file	Experienced Health Care Database Researchers	National meetings or AHRQ Offices	3 Part (90- minute segments) Electronic Training Course	Intermediate/Advanced HCUP Researchers	HCUP-US Web site or CD		
			Teaching tool TBD based on current technology		HCUP-US Web site or CD		

C.21.3. Customize Masters for Specific Presentations

Existing and newly developed master presentations (including courseware) will serve as the foundation and be customized for specific presentations. Customizing the masters will enable each presentation to be tailored to specific audiences and venues. AHRQ maintains a library of previous master and customized presentations which can serve as a reference for future customization. For example, the 90 minute master is used as a starting point for an overview of HCUP at the AcademyHealth Annual Research Meeting. After customizing for the audience and venue, the meeting-specific presentation is maintained in the HCUP files. In the following year, the Contractor should use the most current master and review the previous years' AcademyHealth presentation to most efficiently prepare a new AcademyHealth presentation.

C.21.3.1. Customize Presentations

The Contractor shall customize the content of presentations to fit the audience and venue of most presentation deliveries. Each time HCUP is presented to a new special interest group, the Contractor shall select a presentation master, and tailor it to the specific needs of the audience and venue. The presentation selected as a master for customization shall be based on the length and type of presentation desired by AHRQ to be delivered. Research examples provided in the presentation shall be tailored to the interests of the audience. For example, if a 90 minute presentation were desired for clinicians at the American Pediatric Association, the Contractor may use the existing 90 minute overview presentation as a template, and customize its focus to reflect the interests of that audience.

AHRQ anticipates that most new conferences, meetings and special sessions will require customizing existing presentation templates. Presentations will also need to be customized for audiences recommended for outreach efforts (see Section C.24.1).

In Years 1 and 2, AHRQ anticipates five presentations will require customization each year. In Years 3, 4 and 5, eight presentations will require customization each year. The presentations selected for customization will be determined by AHRQ staff independently and/or with the Contractor.

C.21.4. Provide all Presentation Materials and Equipment

C.21.4.1. Develop Written Support Materials

The Contractor shall provide all written materials associated with a presentation. These materials include writing and submitting abstracts, announcements, invitations, handouts, flyers, information packets, and background analyses, etc. making sure that all materials contain up-to-date, accurate technical information about HCUP. Written materials and general HCUP materials will be required for most presentations, and will need to be tailored for the specific audiences.

Professional graphic and design support may be required for development of some written materials.

C.21.4.2. Supply Presentation Equipment

The Contractor shall provide or arrange provision of all equipment associated with a presentation. This equipment may include displays, signs, posters, banners, and other presentation materials.

C.21.5. Document Presentations

Contractor shall provide an annual report that lists the presentations (including courseware) by name, with a description of them based on length, targeted audience, delivery venue, and its electronic document name. The dates and specific audiences for which they were used (e.g., June 2006 AcademyHealth Health Methods Seminar) should be listed for each presentation. This list will be used to keep track of presentations, and to help AHRQ and Contractor staff decide which presentations to be used as templates for modification and customizing.

C.21.6. Represent HCUP at Conferences, Meetings and Other Venues

In addition to the expository and training presentations, the Contractor shall represent HCUP at conferences, meetings and at other venues for promotion and dissemination of HCUP and its products. The Contractor shall work with AHRQ to plan and implement outreach to established and new audiences to educate them about HCUP resources.

C.21.6.1. Deliver In-Person Expository and Training Presentations

In Years 1 and 2, the Contractor shall make 8 presentations per year at conferences, meetings and other venues, to educate a variety of audiences (health service researchers, policy analysts, decision makers, social scientists, clinicians, etc.) about HCUP, its applications and the benefits of its use, and to teach select audiences how to actually use HCUP databases and software tools. The number of presentations will increase to 10 for years 3 through 5. See Table 9 below. The expository presentations will range from basic overviews to advanced explanations of HCUP, using the 45-60 minute, 90 minute, and all day, PowerPoint slide shows developed, updated, modified and/or customized in Section C.21. In the past, presentations have been made at Academy Health, Society of General Internal Medicine (SGIM), National Association of Health Data Organizations (NAHDO), American Public Health Association (APHA), as well as any new meetings or venues that are suggested by the Contractor and/or by AHRQ. The training presentations will usually be a full day and will provide HCUP users with computer based hands-on experience generating data and using software tools.

The Year 1 and Year 2 presentations are summarized in Table 9.

Table 9 IN-PERSON ANNUAL PRESENTATIONS BY LENGTH AND AUDIENCE					
Number of Presentations		Length	Audience		
Year 1 – 2	Year 3 – 5				
2	3	45-60 minutes	Policy Analysts, Decision Makers, Intro for Researchers		
3	3	90 minutes	Policy Analysts, Decision Makers, Partners, Intro for Researchers		
3	4	Full day	Researchers/Technical		
8 Total	10 Total				

Prior to presenting, Contractor staff may observe an AHRQ led presentation. The Contractor staff may initially co-present with AHRQ staff, and eventually transition to presenting without AHRQ staff present for most meetings. Contractor staff shall provide at least one dry-run presentation to obtain AHRQ input on content and delivery style prior to the first time individual Contractor staff members deliver any public presentations.

The Contractor staff presenting or exhibiting shall have the following expertise: (1) working knowledge of and experience with all public HCUP databases (i.e., SID, SASD, SEDD, NIS, and KID), (2) In depth knowledge of the types of research that could be conducted with each

database; (3) knowledge of how to obtain the HCUP databases and the application process; (4) experience running HCUPnet and ability to answer related questions; and (5) knowledge of other HCUP-related products (e.g., CCS, AHRQ QIs, Fact books), and (6) complete knowledge of the PowerPoint slide shows and teaching tools in described in Section C.21, and familiarity with the content of each presentation, such as the HCUP 45-60 minute, 90 minute, half day, and all day slide shows.

Contractor staff training audiences with hands-on HCUP use should additionally have the following expertise: (1) experience in using statistical programs such as SAS, SPSS or SUDAAN, and (2) complete familiarity with how to use HCUP databases and software tools.

The Contractor should assume that AHRQ will need two Contractor staff to co-present with AHRQ staff when the conference is a full day event. A Contractor senior-level researcher and intermediate-level researcher will be required. For shorter presentations, one Contractor staff member will team with AHRQ to deliver the presentations. In some cases the Contractor shall present without AHRQ staff present for meetings. When AHRQ staff are not present, there shall be two Contractor staff per presentation, and as with the full day event, they shall be a senior-and intermediate-level researcher.

C.21.6.2. Represent HCUP at Exhibit Booths

The Contractor shall represent HCUP at up to 8 conference exhibit booths per year. In staffing the exhibit booths, the Contractor shall present and distribute promotional materials to inform conference attendees of HCUP databases and products. The Contractor shall staff the exhibit booth with two full-time equivalent (FTEs) staff persons for the entire exhibit period for each conference attended. Between the two FTEs, exhibit booth staff will have the following expertise: (1) technical knowledge of and experience with all public HCUP databases (NIS, KID, SID, SASD and SEDD) and basic understanding of the differences among these databases, (2) general knowledge of the types of research that could be conducted with each database; (3) understanding of how to obtain the HCUP databases and the application process; (4) experience running HCUPnet and ability to answer related questions; and (5) familiarity of other HCUP-related products (e.g., CCS, AHRQ QIs, Fact books). While providing information about HCUP, the Contractor shall record leads for user impact stories among booth visitors. (See Section C.20.4.2.)

The Contractor shall be responsible for providing all materials, including actual presentations (PowerPoint or other electronic medium) as per section C.21, podium signs, handouts and promotional items based on the expected numbers of attendees. Handouts and promotional items include folders, brochures, flyers, printed reports, and promotional items. The Contractor shall recommend the handout and promotional materials to furnish at each presentation and booth, with AHRQ making the final decision. Materials will vary by audience. Most standard HCUP printed materials will be provided by AHRQ. The Contractor shall develop new materials that AHRQ does not have, but that would aid promotional activities. Some graphics and design support may be required for promotional materials. The Contractor shall be responsible for transporting all materials to and from the sessions, and setting up and taking down HCUP displays.

The Contractor shall work through HCUP staff with the AHRQ's OCKT staff to ensure compliance with AHRQ rules and to coordinate exhibit booth space sharing, when at AHRQ exhibit booths. When necessary The Contractor shall also work through HCUP staff with OCKT

staff to secure exhibit booth space, coordinate logistics of exhibit booth set-up and breakdown, and ensure delivery of materials and equipment at conference sites.

Three business days following the close of booth activities, the Contractor shall e-mail a memo to AHRQ briefing them about the issues raised during the activity, and include a list of booth visitors with contact information, frequently asked questions, suggestions for HCUP, and the Contractor's suggestions for improving future booth activities. The Contractor shall summarize the booth experience in the quarterly Technical Support and Outreach Statistics Report (described in Section C.20.7) and Annual Report of HCUP Outreach Activities (described in Section C.24.3).

The Contractor shall budget for the required travel for presentations and exhibitions using real locations of expected conferences where possible (e.g., the AcademyHealth and SGIM conferences 2007, and each year thereafter). Travel budget should include travel for two people to eight locations outside of the DC area each year for presentations and exhibits. It can be assumed that six presentations and six exhibit booth activities per year will overlap. Travel costs and assumptions may be adjusted accordingly as long as sufficient staff is provided for exhibit booths.

C.22. MAINTAIN AND CREATE SOFTWARE TOOLS

As part of the HCUP project, various software tools are made available to users that can be employed with HCUP and with other administrative data to improve the ease of use and usefulness of its databases. The software tools are posted on the HCUP-US Web site (http://www.hcup-us.ahrq.gov/tools_software.jsp) where documentation for each is available and files can be downloaded. These files include SAS programs and files for categorizing ICD-9-CM, ICD-10, and CPT codes in various ways. The Contractor shall maintain and update these software tools, create new ones, and ensure that all the tools are available in a user-friendly form. Currently, there are seven software tools which will require Contractor maintenance. Over the course of the contract, the Contractor shall create and maintain three additional software tools

The "Tools & Software" page of the HCUP-US Web site provides details about all currently available tools. Note that links to two tools developed but maintained outside the HCUP contract (AHRQ Quality Indicators and HCUPnet) are also included on this webpage. Web site links to these two tools will be continued, but their maintenance will not be part of this contract. A third tool, the cost-to-charge ratio file is maintained under a different section of the contract (See Section C.14.1)

The software tools maintenance and development tasks require the services of expert programmers, medical coding specialists and clinicians. In addition, skills in writing are required to ensure that documentation is clear and understandable.

C.22.1. Maintain and Update Existing Software Tools

The Contractor shall maintain and update existing software tools for use with HCUP data and other administrative data. The Contractor shall continue to make the software tools available on the HCUP-US Web site. The existing software tools are:

1) Clinical Classifications Software (CCS). The CCS provides a method for classifying ICD-9-CM diagnosis and procedure codes into clinically meaningful categories for

- aggregate statistical reporting. CCS consists of two related classification systems, single level and multi-level. The single-level CCS aggregates diagnoses and procedures into homogeneous, mutually exclusive categories. The multi-level CCS expands codes into a hierarchical system.
- 2) CCS-ICD-10. This software tool assigns ICD-10 diagnosis codes (used for mortality reporting) to the CCS diagnosis categories.
- 3) CCS-MHSA. This software tool re-assigns ICD-9-CM diagnosis codes for mental health and substance abuse to a new set of categories. The tool includes a SAS program that users can employ to reassign the original CCS categories pertaining to mental health and substance abuse to the new CCS-MHSA categories, as well as a SAS program to apply the CCS-MHSA to data that do not currently have the original CCS assignments.
- 4) CCS-CPT. This tool assigns CPT-4 procedure codes to the CCS procedure categories. (Because CPT (Current Procedural Terminology) is a proprietary product of the American Medical Association, users who wish to download the CCS-CPT are required to agree to a "point-and-click" license agreement on the HCUP-US Web site).
- 5) Comorbidity Software. This software tool assigns variables that identify coexisting conditions on hospital discharge records. It is composed of two SAS programs: one to create formats for the ICD-9-CM diagnoses and Diagnosis-Related Groups (DRGs) and the other to apply these formats to discharge data.
- 6) Procedure Classes. This software tool assigns ICD-9-CM procedures to four mutually exclusive categories: major therapeutic, minor therapeutic, major diagnostic, and minor diagnostic.
- Chronic Conditions. This tool designates all ICD-9-CM diagnosis codes as chronic or not chronic.

The Contractor shall maintain and update these existing software tools, by reviewing them annually to ensure that the most recent coding systems are accommodated. ICD, DRG and CPT codes undergo at minimum annual updates that require corresponding updates to these tools. ICD and DRG updates are made available in the summer of every year and go into effect on October 1 for the following fiscal year (e.g., FY 2006 changes went into effect October 1, 2005). In the future it may be possible that there will be mid-year updates of the ICD-9-CM and DRG systems. Should this occur, the tools will be updated on a mid-year basis as well. CPT codes are updated on July 1 of each year.

The Comorbidity Software tool should be updated first and made available prior to the other tools because another AHRQ product (the AHRQ Quality Indicators under separate contract) relies on it.

A staggered delivery timeline should be developed by the Contractor and all updates for the ICD-based tools should be completed by October 1 of the relevant fiscal year (i.e., FY 2007 changes should be incorporated into the tools by October 1, 2006). Thus, some of the tool updates will be completed prior to October 1. The CCS-CPT tool will be completed by August 1 of each year in which the new codes go into effect. All aspects of each software tool should be reviewed at this time to ensure they are up-to-date, including programs, format libraries, online documentation and instructions. In addition, throughout the year, the Contractor shall make enhancements, revisions, and corrections based on feedback from users, as directed by the Project Officer. All software tools and their documentation should be designed for the HCUP-US Web site, with special attention to making the tools easy to use and accessible to a wide range of users.

Prior to the release of all updated tools, the Contractor shall perform a thorough double check of all changes to the tools and test the tools on data to check their accuracy and to ensure that no errors have been introduced.

C.22.2. Perform Tool-related Activities and Improvements

The Contractor shall maintain and update a software tool development logistics document which outlines how the tools are maintained and updated, how they are checked for accuracy, and the process used to make them publicly available. The logistics document is approximately 5 pages and should be updated at least annually or whenever there is a change in the processes required for tool development and maintenance. The Contractor will be given access to the existing mimeo on award of the contract.

The Contractor shall review the software tool development logistics to ensure that the process is efficient and accurate. During the first year of the contract and for each new tool thereafter, the Contractor shall critically evaluate the processes employed. The objective is to identify how the processes can be improved in terms of accuracy (with double-checks and safeguards built in) and timeliness. With AHRQ approval, the Contractor shall implement changes to improve the processes.

C.22.3. Create New Software Tools

Task C.22.3 is an Option.

The Contractor shall develop new software tools for use with HCUP and other administrative data. The Contractor shall create three new software tools over the course of the contract, one in each of years 2, 3, and 4. Some of the concepts for software tools will originate from AHRQ research staff, but it is expected that some of the concepts will originate from the Contractor as well. AHRQ anticipates new tools to emerge from analyses and research studies conducted by AHRQ or by the Contractor. Experience has shown that the software tools are often useful to outside researchers. The Contractor shall develop and release each new software tool in a user-friendly manner with complete and helpful documentation. Typically, a new software tool would be used or described in a published article or government publication associated with research conducted by AHRQ or contract staff. However some may be developed and released on a faster track.

The following are examples of the types of software tools that are likely to be created over the course of the five-year contract:

- 1) Kids' CCS. This tool will modify the existing CCS in order to develop categories of diagnoses that are relevant to children's use of health care services. It is expected that the following process would be employed in developing this tool:
 - Apply the existing CCS diagnosis classification to the most recent Kid's Inpatient Database (KID) and examine those categories that currently do not capture children's care.
 - Review materials provided by AHRQ on a previous attempt to create a Kids' CCS.

- With clinical and coding consultation, and using an iterative process that involves experimenting with various groupings of ICD-9-CM codes, develop CCS diagnosis categories that describe children's care in hospitals. Ideally, this will entail consulting with a panel of clinicians regarding logical and meaningful categories.
- The total number of categories should be on the order of the current diagnosis CCS (approximately 250 - 300).
- 2) ICD-10-CM version of the CCS. When ICD-10-CM becomes the new standard for health care data (possibly as early as 2009), a CCS tool should be developed specifically for the new coding system. The current CCS for ICD-10 can be used as a starting point for the diagnosis system, but the procedure system will have to be created.
- 3) A compilation of statistical programs that can be applied directly to HCUP data so that users can easily generate statistics. Such programs could include frequencies and cross-tabulations, multivariate regression models, and hierarchical models. Some programs would include references to the software tools described above.
- 4) Templates for annual reports. See section C.23.3 for a description of Annual Reports. Once an Annual Report becomes established there will be a SAS program associated with it that will be used annually to generate the report. This SAS program will be made available on the HCUP-US Web site so that HCUP Partners and others may use it to generate comparable reports based on their own data.

Prior to the release of all new tools, the Contractor shall perform thorough double checks and tests of them. This quality control process is briefly described in Section C.22.1. The Contractor shall write all the documentation associated with the software tool (overviews, descriptions, details, methods of use, etc.). The Contractor shall post the completed tool and its documentation on the HCUP-US Web site.

C.23. CONDUCT DATA ANALYSES AND WRITE ANALYTIC REPORTS

Reports are an important means of communicating and disseminating information about HCUP and information derived from it to existing and potential HCUP users. The reports describe HCUP data and research; present statistics, analyses and findings; and provide special technical analyses. Timely reports with information on healthcare quality, safety, effectiveness and efficiency can impact decisions that inform health care in the United States. Showcasing the HCUP project through relevant, well-written reports properly disseminated is a critical function.

Several types of reports are already being generated on a regular basis. New series of reports have been formulated for development. The goal of the mix of series is for HCUP information to reach a wide range of audiences through a variety of publications, electronic and print. The reports within each series must be developed at a regular interval and in a timely fashion.

C.23.1. Special Technical Reports

<u>Special Technical Reports</u> enable exploration of an HCUP-related topic in some detail. The reports cover a broad range of topics, often exploring specific data elements or methods used in HCUP and are distinct from the technical documentation created for the databases. Reports

become part of the HCUP Methods Series (<u>www.HCUP-us.ahrq.gov/reports/methods.jsp</u>). Special Analyses are developed by contract staff in close collaboration with HCUP staff.

Examples of previously written Special Technical Reports include:

- A study that examined the use of E codes in injury-related discharges across states participating in HCUP. The report can be found at: http://www.hcup-us.ahrq.gov/reports/2004 6.pdf
- An analysis that scrutinized the use of the HCUP Nationwide Inpatient Sample for trend
 analysis over the time covered by HCUP data. This report resulted in the development
 of alternative weights for earlier years of data to compensate for changes in the
 sampling and weighting strategy for the NIS that occurred in 1998. The report can be
 found at: http://www.hcup-us.ahrq.gov/db/nation/nis/trendwghts.jsp
- An exploration of the use of observation status in HCUP hospitals. The report can be found at: http://www.hcupus.ahrq.gov/reports/FinalReportonObservationStatus v2Final.pdf.
- A study examines the use of the "present on admission" (POA) indicator for secondary diagnoses, comparing this indicator to selected AHRQ Patient Safety Indicators (PSIs). The purpose of the study currently underway is to examine the extent of agreement between the PSIs and the POA indicator in identifying potential complications of care and to assess to what extent hospitals change rankings when using the PSIs versus the POA indicator.

Examples of new Special Technical Analyses include:

- Studies that make use of geographic information systems (GIS)
- Modeling efficiency measures: severity-adjusted costs, severity-adjusted length of stay (LOS)
- Evaluations of the extent to which HCUP (and the administrative data on which it is based) can be used for syndromic surveillance
- Evaluations of the accuracy of race/ethnicity coding in HCUP data (e.g., compare race coding in HCUP data to race coding in Medicare data, at a hospital level)
- Evaluations of the extent to which episodes of care can be created using HCUP and other administrative data
- Tools that help users to make better use of HCUP data
- Examinations of data quality and practices that will help states to improve the quality of their data
- Examinations of current outpatient physician data collection efforts with the intent to provide guidance to other states interested in embarking on collection of physician office data

The Contractor shall post the final PDF report on the HCUP-US Web site. Special Analyses are web-based only but may result in manuscripts to be submitted for publication into peer-reviewed journals. No professional layout and design services are required.

The Contractor shall develop and write one new Special Technical Analysis Report in Year 1 of the contract, and two Reports per year beginning in Year 2 as shown in Table 10.

Table 10 DATA ANALYSES AND ANALYTIC REPORTS						
Task	Year 1	Year 2	Year 3	Year 4	Year 5	
		Reassess all report series				
		Develop plan for reports series				
Existing Reports	<u> </u>					
FACT BOOKS	1 per year AHRQ-led	1 per year AHRQ-led 1 per year Contractor- led	1 per year AHRQ-led 1 per year Contractor- led	1 per year AHRQ-led 1 per year Contractor- led	1 per year AHRQ-led 1 per year Contractor-led	
STATISTICAL BRIEFS	9 per year	12 per year	12 per year	12 per year	12 per year	
New Report Series						
ANNUAL RESEARCH REPORTS	1 per year	1 per year	1 per year	1 per year	1 per year	
SPECIAL TECHNICAL ANALYSIS REPORTS	1 per year	2 per year	2 per year	2 per year	2 per year	

C.23.2. Write Descriptive and Analytic Reports for Multiple HCUP Series

Task C.23.2 is an Option.

In Year 1, the Contractor shall write the reports for the existing and new series as described below. In Year 2, as covered in Section C.23.3, the Contractor shall assess the adequacy of these two sets of report series in meeting AHRQ's goal of reaching and providing coverage about HCUP to a full range of constituents. At that time, the Contractor shall develop a plan with recommendations on the combination of series of reports to suit appropriate audiences, with report frequencies and methods of dissemination. When recommendations from that plan are implemented, there may be minor changes to the report descriptions, and frequency and methods of distribution noted below.

C.23.2.1. Existing Report Series

Two series of descriptive and analytic reports have already been developed and a number of reports from each series have been written and disseminated. These series are a regular

HCUP product with periodic production of reports at established times. The reports in each series are published and/or placed on the HCUP-US Web site (www.hcup-us.ahrq.gov/reports.jsp) at somewhat regular intervals.

The Contractor shall write the reports in the existing series as described below at the frequencies indicated. However, as mentioned, there may be slight modifications to the characteristics of the series and their dissemination frequencies based on the comprehensive report series' assessment conducted in Year 2 described in Section C.23.3. The existing reports will continue to use the same design template and layout.

The existing report series are:

1. <u>Fact Books</u> are descriptive publications that use graphics and minimal text in bullets to provide aggregate statistical information created from HCUP data in a format that is easily understood. Topics are of fairly broad interest to researchers and policymakers. A relatively brief executive summary provides an overview of findings for each Fact Book and can make use of "call-out" text to focus on specific pieces of information that are most relevant. Fact Books are developed by contract staff in close collaboration with HCUP staff. A print-ready file is made available to AHRQ and a web-ready file is produced for the HCUP Web site. Fact Books require professional graphic and design services provided through the contract. An example of a Fact Book can be found at: http://www.ahrq.gov/data/hcup/factbk6/factbk6.pdf

The Contractor shall assist AHRQ staff in the development of a Fact Book each year. The Contractor's responsibility will be to support AHRQ staff by advising, generating data, and performing analyses and other research. Additionally, the Contractor shall lead development of one new Fact Book each year with AHRQ staff input, beginning in Year 2 of the contract.

2. <u>Statistical Briefs</u> are quick, easy-to-read summaries of HCUP data, 1 – 2 pages of text plus graphics (5 – 6 pages each), suitable for a policy or non-technical audience and available only on the HCUP Web site or through electronic dissemination. They will usually be developed so that they are suitable to use for the AHRQ "News and Numbers" series which is aimed at a general and trade journalistic audience "<u>News and Numbers</u>". Some statistical briefs can be drawn from existing publications such as Fact Books and the Annual Research Reports (described below). The Contractor should allow one week for each approval step from AHRQ for this report series only. Examples of <u>Statistical Briefs</u> can be found on the HCUP-US Web site.

The Contractor shall develop one new Statistical Brief per month for each year of the contract, starting with month 3 following award. Depending on the availability of funding, additional Statistical Briefs may be produced.

C.23.2.2. New Report Series

Annual Research Reports are a new approach for disseminating information about HCUP. Annual Reports will be web-based documents that will present interesting summary statistics on a variety of topics. Some of the statistics may be drawn from publications such as the Hospitalization Fact Book (see Section C.23.2 and http://www.ahrq.gov/data/HCUP/factbk6/factbk6.pdf), the children's annual report http://www.ahrq.gov/fund/contarchive/rfp060009.htm, and other descriptive statistics. Other

statistics will be generated de novo. It is anticipated that most of the statistics will be drawn from the Nationwide Inpatient Survey (NIS). Once an Annual Research Report is developed, it

will be repeated annually with updated statistics, and made available on the HCUP-US Web site. The initial Annual Research Report will be approximately 10-15 pages long. With each annually updated report, it is anticipated that 1-2 pages of new statistics will be added to the material that was generated for the previous year. A template design consistent with other reports series shall be developed and used for each Annual Research Report.

The Contractor shall develop one new Annual Research Report per year of the contract. The report must be completed by August of each year, which is within two months of the annual June release of the NIS. Thus all preparation for the Annual Report must be completed prior to NIS data availability (including all programming, development of report templates, and formatting) so that when the new data are available, the programs can be run and all statistics generated immediately.

C.23.2.3. Recommend Report Topics

For each report in a report series, the Contractor shall recommend topics to AHRQ to consider for selection. Lists of desirable topics for reports will be maintained by the Contractor and sometimes independently by AHRQ. The list of topics will be generated as a result of user contacts, Agency and department priorities and other considerations. With guidance from the Contractor, AHRQ approves the topic selection for each report.

C.23.2.4. Prepare Drafts and Final Copies

The Contractor conceptualizes, performs analyses and writes each report, although it is expected that there be an iterative process with revisions suggested by AHRQ. The report writing task requires the services of experienced health services researchers and policy analysts who are strong and skilled writers. Some reports require the expertise of a medical clinician.

The Contractor shall provide AHRQ with an outline and first draft of the report for review and approval. First and second drafts of the report should be reviewed and edited by Contractor staff prior to submission to AHRQ, with the expected result of a well-written, relevant, high quality report. These drafts are not considered deliverables, but should be provided as milestones in the progress of the reports. The Contractor shall provide AHRQ with final reports that are polished and accurate, and that have relevant and interesting content. The Contractor should allow four weeks for each approval step from AHRQ, unless otherwise specified. The Contractor shall provide a professional technical editor to review the final draft of each report. All text will adhere to HCUP and AHRQ style guidelines. Published reports may require professional layout, design and graphic services. Each outline, draft, and the final report must be approved by AHRQ staff. For reports that will be published, the Contractor shall give AHRQ a print-ready hard copy and electronic copy. All reports posted on the HCUP-US Web page should be delivered in an appropriate format, and adhere to federal government and HHS Web standards, including Section 508 compliance (see www.section508.gov). The Contractor shall post all final reports on the HCUP-US Web site.

C.23.3. Assess All Report Series and Recommend an Overall Plan

Task C.23.3 is an Option.

In Year 2, the Contractor shall review the series of reports that HCUP has already developed (described in Section C.23.2.1) and the reports that AHRQ suggested as a new series

(described in Section C.23.2.2) with the purpose of assessing the comprehensiveness, appropriateness, and value of these series of reports. The goal of the assessment is to determine if a balanced and appropriate variety of written HCUP reports have been selected to be generated to reach a varied audience of users, including policy analysts, decision makers, and health services researchers. In addition, the assessment should examine whether the resources required to produce a report is appropriate given the impact of the report.

The Contractor shall develop a long-term plan that describes and specifies the characteristics of all the report series that it recommends that AHRQ use. The plan should describe each report series, production frequency, dissemination method, and target audiences. Justifications for the recommendations should be given. The plan should include samples of proposed topics of reports for each series, a timeline for the reports in each series, and a list of Contractor staff who would write the reports, and their relevant experience. AHRQ will make a final determination of the report series to be selected and their characteristics.

C.24. INCREASE USE OF AND IMPACT FROM HCUP THROUGH OUTREACH

Task C.24 is an Option.

Outreach efforts are needed to promote the use of HCUP and expand its value among current and potential users. This requires developing and implementing strategies to inform stakeholders about HCUP and its products through presentations, training, information dissemination and promotional activities.

C.24.1. Develop, Recommend, and Implement Selected Outreach Initiatives

The Contractor shall assist AHRQ in prioritizing and implementing efforts to disseminate and to increase use and impact of HCUP and its products.

The Contractor is expected to work with an experienced marketing professional, (i.e. either a firm or an individual), to develop and implement outreach efforts. The Contractor is also expected to work with a professional design firm for graphic presentation. To effectively increase use and impact of HCUP, the marketing professional must have a working knowledge of key components of HCUP.

The Contractor may recommend a marketing professional and graphic design firm with previous or existing relationships to AHRQ. The marketing professional should have experience with federal government clients, healthcare related activities, and projects where databases are an important component.

C.24.1.1. Develop an Annual Outreach Plan

The Contractor and marketing professional shall develop an annual outreach plan for HCUP. The plan shall be based on: 1) prioritizing recommendations from two 2003 reports commissioned by AHRQ to produce an HCUP marketing plan and a list of key audiences. Selected pages from the reports, "HCUP Final Marketing Plan" and "Memo of Key Audiences for HCUP Products" can be viewed at http://www.ahrq.gov/fund/contarchive/rfp060009.htm and provide useful background information. Full reports will be available to the Contractor awarded this contract.

The recommendations from the 2003 marketing plan and list of key audiences will be the primary input to the plan, and will be based on efforts that remain to be implemented, and that are still appropriate and feasible to carry out.

The plan should identify key audiences to target (e.g., students, researchers, consultants, policy makers) and the best venues and methods to reach them (e.g., national meetings, AHRQ workshops, special visits, e-mail campaigns, advertising, mailing lists, etc.). The plan should describe the HCUP products best suited to promote to each audience. The details of the plan should include:

- Promotion, dissemination and outreach strategies
- Specific evidence or rationales as to why the selected audiences should be targeted first
- Specific evidence or rationales as to why the selected outreach tasks are best suited to reach selected audiences
- The specific roles of the marketing professional, Contractor, and AHRQ staff
- Suggested timeline for implementation of each initiative
- Estimated budget for each component
- Demonstrated ability to carry out all initiatives from conception to implementation, including all logistical and administrative tasks

The strategies recommended for implementation must be stand-alone efforts that have clear goals with start and end dates and that could easily be incorporated with a larger more coordinated effort.

C.24.1.2. Implement Outreach Initiatives

Through regular meetings and/or conference calls, the Contractor, marketing professional, and AHRQ will work together to decide on implementing strategies and carry out particular options each year. AHRQ makes the final decision on the initiatives to pursue. AHRQ will provide guidance to insure that marketing and dissemination activities remain consistent with agreed-upon uses for HCUP data. With AHRQ approval, the Contractor and marketing specialist shall develop and implement selected techniques or "benchmarks" to measure the success of each outreach initiative conducted. Once a year, an in-person meeting will take place at AHRQ headquarters in Rockville, Maryland.

Examples of outreach activities include partnerships with strategic organizations, visits to schools of public health, establishment of relationships with federal and state agencies, improvement of HCUP computer-based presentation, representation at exhibit booths, and promotional items. Outreach efforts may target particular groups, such as academicians, researchers, or policy makers.

The Contractor shall be responsible for organizing and coordinating all aspects of special meetings, workshops or sessions as part of HCUP outreach initiatives. When outreach sessions are held at conferences organized by other parties (e.g., APHA, AcademyHealth), the Contractor shall be responsible for fulfilling the requirements of the conference sponsors.

Three business days after the implementation of outreach activities, the Contractor shall e-mail a short de-briefing memo to AHRQ about the initiative and issues raised.

Summary information about the initiatives implemented should be included in the quarterly Technical Support and Outreach Statistics Report described in Section C.20.7.

Implementation of activities may require the Contractor and marketing professional to travel to places outside the Washington DC area.

C.24.2. Create, Coordinate, and Disseminate Written Materials

The Contractor shall produce outreach promotional materials for dissemination. All materials shall be proofread and edited by a professional technical editor. All written materials shall follow standard AHRQ/OCKT and HCUP writing style. All materials produced shall use AHRQ and HCUP logos and designs, when required.

C.24.2.1. Create Announcements

The Contractor shall write drafts and subsequent revisions, and deliver polished narratives of up to seven announcements per year. Each announcement should be about 1-2 pages long. Electronic copies of all developed materials shall be provided to AHRQ as soon as possible after completion. Announcements may be used for press releases and for HHS and AHRQ news items, and are placed on the HCUP-US Web site. Examples of announcements can be viewed at http://www.HCUP-us.ahrq.gov/news.jsp. Most announcements will be refinements or updates of previous announcements.

C.24.2.2. Create Quarterly HCUP Newsletter

The Contractor shall write and produce a quarterly newsletter that focuses on HCUP news and events. The Contractor shall lead the effort from conception to final distribution-ready copy. The newsletter is written for HCUP Partners and other users of HCUP data and products. The format will be the same as currently in use, which can be seen at www.HCUP-us.ahrq.gov/news.jsp. The newsletter currently consists of the following sections: News and Announcements, Recent Publications, User Tech Tips and HCUP Calendar. The existing template will be used for the newsletter banner, layout and design.

For newsletter content, the Contractor shall identify newsworthy topics including:

- New data or product releases
- New publications using HCUP products
- Sections spotlighting certain types of data, for example, outpatient data
- Recent presentations given by staff
- Data development efforts
- Announcements of up-coming training and conferences
- Interesting statistics from HCUP databases designed to generate excitement on research topics and/or HCUP products
- Other AHRQ opportunities of relevance to Partners

The newsletter should include information on inpatient and outpatient data that could be useful to HCUP Partners and other HCUP users. For newsletter items that focus on data development efforts, technical advice should be sought from a technical expert on the HCUP team.

The Contractor shall prepare initial, interim and final drafts of each quarterly newsletter for HCUP review. The Contractor shall have the final draft reviewed by a professional technical editor prior to HCUP final review. The newsletters are to be well-written and polished. Wording should comply with the AHRQ/OCKT and HCUP technical style manual.

The Contractor shall convert the final approved version to HTML format and deliver it to AHRQ ready for dissemination through e-mail distribution to the HCUP LISTSERV (currently 700 subscribers). The Contractor shall not need to process LISTSERV subscriptions. The Contractor shall post the newsletter on the HCUP-US Web site and archive the earlier edition.

C.24.2.3. Maintain HCUP Calendar

The Contractor shall maintain a current HCUP calendar of events on all relevant activities for the HCUP project. This will involve gathering information from subcontractors and AHRQ staff about noteworthy events such as meetings, conferences, database releases, and product releases. The Contractor shall present the material in a consistent format that they develop, and with clear and polished narrative and descriptions. The Contractor shall post the calendar on the HCUP team section of the HCUP-US Web site. A second calendar shall be developed with a subset of these events that shall be posted on the public portion of the HCUP-US Web site. The Contractor shall update the calendars weekly, as needed.

C.24.2.4. Create Outreach and Educational Materials

The Contractor and marketing professional, with assistance from a professional design firm, shall design and produce five new written promotional items per year. Examples of these items include brochures, flyers, letters, and notices. Maximum length is four pages per item. The Contractor and marketing professional shall also update five existing written promotional items per year, to make them accurate with current HCUP information.

C.24.3. Provide Management Reports on Outreach

An immediate short debriefing memo should be e-mailed to the AHRQ Technical Support staff lead following each outreach/presentation/training activity/booth activity addressing the experience, any important issues raised, and suggestions for improvement for future activities. Summarize information quarterly in the Technical Support and Outreach Statistics Report (see Section C.20.7).

The Contractor and the marketing professional shall prepare a three- to four-page "Annual Report of HCUP Outreach Activities" that contains:

- Summary of work accomplished during each contract year, beginning one year after contract award
- The Contractor and the marketing professional's recommendations for modifying or refining outreach, through promotion and dissemination plans for the next calendar year.
- Summary of all activities for the last calendar year, regardless of who achieved the activity (e.g., performed by the Contractor, marketing professional, or AHRQ). For example, the annual report should document (1) HCUP presentations conducted, by audience and venue (e.g., conference name, meeting site and location), (2) HCUP training sessions conducted, by audience and venue, (3) Exhibit booth representation

(with corresponding conference names), (4) Press releases and corresponding topics announced conducted, (5) Newsletters written, (6) New HCUP products released (e.g., Fact Books, Highlights, databases, software tools), and (7) New HCUP outreach tools (e.g., brochures, pamphlets, flyers).

C.25. TRANSLATION OF DATA FOR USE BY SURVEILLANCE DATA SYSTEMS

Task C.25 is an Unpriced Option

HCUP has information, including admission and discharge dates for specific conditions by age, payer and charges, on all hospitalizations in 38 states (State Inpatient Databases) and all emergency department visits in 17 states (State Emergency Department Databases). If packaged correctly, this information can be used to provide baseline estimates and projections by date for specific conditions to inform surveillance projects about deviations in expected hospital and emergency department utilization and the potential cost impact of those deviations. HCUP is uniquely suited to inform other Federal and state initiatives, including but not limited to the Centers for Disease Control and Prevention (CDC)'s BioSense, American College of Surgeons' National Trauma Bank, Substance Abuse and Mental Health Services Administration (SAMHSA)'s Drug Awareness Warning Network, infectious disease registries, CDC's initiatives focused on emerging conditions (e.g., Early Aberration Detection System), and surveillance initiatives related to other environmental factors. With the growth of emergency department data in HCUP, dissemination of the data in geographic information systems (GIS) and other user friendly formats that readily inform national and state surveillance projects is critical. Taking into account the needs of existing Federal and state data systems for emergency preparedness, this project would require the innovative creation of a product that displays utilization data from HCUP in a readily accessible and translatable format (e.g., importable maps, graphs, tables). The product would be designed to be easily updated with HCUP data as it becomes available.

C.26. EXPANSION OF HCUP OUTPATIENT DATA TO IMPROVE GEOGRAPHIC AND DEMOGRAPHIC REPRESENTATION AND TO IMPROVE TIMELINESS OF HCUP

Task C.26 is an Unpriced Option

As mentioned throughout this RFC, HCUP will continue to increase its expansion with outpatient data collection and dissemination. HCUP currently collects ambulatory surgery (AS) data from 23 states and emergency department (ED) data from 19 states. For the 2005 data year, HCUP plans to have ED data from 23 states and AS from 25 states. The base SOW requests the contractor to expand outpatient data collection and dissemination at a moderate pace by recruiting outpatient data from two states each year, develop a nationwide outpatient database within two years, and develop products to disseminate the outpatient data. This option facilitates the expansion of HCUP outpatient data on a faster track than that requested in the base SOW by speeding up activities and augmenting them.

Specifically, the contractor would be tasked to do the following: 1) work with data source organizations to improve their outpatient data by increasing the speed and accuracy of collection, 2) create a pilot database with existing emergency department data and supplemented with "real-time" data from a few pioneering data organizations that have the capacity to submit data on a near real time basis, 3) work with these pioneering data

organizations to create models or "lessons learned" regarding the collection of "real-time" data collection and dissemination, 4) develop a nationwide emergency department database within 1 year of the contract and a nationwide ambulatory surgery database within 2 years of the contract, and 5) develop at least one analytic and one reporting tool specifically for nationwide outpatient databases within 6 months of release of the databases.

C.27. IMPROVING TIMELINESS OF HCUP INFORMATION THROUGH NEAR REAL-TIME STREAMING OF DATA FROM STATE DATA ORGANIZATIONS

Task C.27 is an Unpriced Option

Some HCUP Partners have begun to collect data from hospitals on a continual, near real-time basis using electronic interchange technology (as opposed to batch quarter or annual submissions). Under this option, the Contractor would pilot test a process to collect data as continuous feeds from two to three such Partner organizations. The Contractor shall identify Partners with the capability of sending near-real time data, recruit two to three Partners to participate in a pilot project to send these data to HCUP, develop an implementation plan for this streaming of data, develop the software for accepting the new data and test the process with two to three states. Data collected through near real-time streaming could be useful for making early national estimates on cost, quality and use trends when timelier information is needed than can be produced using the NIS.

C.28. NATIONAL HEALTHCARE QUALITY REPORT (NHQR) AND NATIONAL HEALTHCARE DISPARITIES REPORT (NHDR)

Overview

Since FY 2003, the AHRQ has been required to submit to the Congress annual reports on quality of health care and disparities in health care. The National Healthcare Quality Report (NHQR) provides assessments of health care quality at the national and state levels and tracks improvement across a broad array of quality measures. The National Healthcare Disparities Report (NHDR) provides assessments of health care disparities related to racial and socioeconomic factors at the national level and within diverse priority populations and tracks the NHQR quality measures as well as an array of access measures.

To write these reports, AHRQ staff collects and examines data from over three dozen data sources. HCUP is one of these data sources. This section covers activities expected of the contractor in support of the Reports during FY 2007-2011.

The Contractor shall support the generation of estimates derived from HCUP data for the sixth, seventh, eighth, ninth, and tenth National Healthcare Quality Reports and National Healthcare Disparities Reports (2008-2012 NHQRs and 2008-2012 NHDRs). Each year, the key task involves applying the AHRQ Quality Indicators (QI) software to the HCUP NIS, the SID, and a special analytic file that supports national QI estimates by race/ethnicity for the NHDR. The main products will include consistently defined QI estimates in tables, documentation of methods, special analyses, and coordination with HCUP Partners. The latter effort aims to support States in use of the Reports and seeking to obtain their permission to publish Statelevel estimates for the QIs in the Reports.

This work will be carried out in close collaboration with AHRQ analysts. Each year, the Contractor shall meet with AHRQ staff to plan analyses and table shells for the upcoming Reports. All design changes will be discussed with and approved by members of the Reports Team. Wherever possible the designs and programs developed in the work for the first five rounds of analysis will be used to guide future work. An exception would be cases where AHRQ's requirements have changed. If new programs are written, older data should be re-run to ensure that identical estimates are produced when compared to the existing programs.

Previous reports and documentation of methodology can be found at: http://www.qualitytools.ahrq.gov/qualityireport/browse/browse.aspx?id=2881 for the 2004 NDHR.

C.28.1. Design

C.28.1.1. Leadership

Each year the design of analyses and table shells used in the Reports will be reassessed. To expedite this process, the Contractor shall be expected to be proactive and drive the work to completion within the timeframes specified under the schedule of deliverables. This approach involves strong leadership in: anticipating steps of the process and decisions required by AHRQ; setting deadlines for such decisions; briefing decision makers in writing on each problem (with a solution or options for solutions); arranging a schedule of regular teleconference or meetings at AHRQ to facilitate decisions and review progress on analytical work; and tracking decisions through a dynamic memo that records all decisions on methodological topics with a history of prior decisions. The Contractor shall attend meetings at AHRQ in-person for initial planning meetings, initial results review meetings, and any other meetings requested by AHRQ staff. About 6 meetings per year are expected.

C.28.1.2. Design Decisions

The Contractor shall track and document all design decisions in a dynamic memo, as noted above. The Contractor shall be provided with a report documenting in great detail the methodology work for the previous NHQR-NHDR. The Contractor shall use those background "Technical Notes" to develop decision memos for future Reports.

Decisions made by AHRQ each year include:

- New years of data processing: Each year, the Contractor shall add an additional year
 of NIS and SID data. In 2007, it is anticipated that the Contractor shall process 2005
 HCUP data for use in the 2008 Reports, etc.
- QI software review: Each year, the Contractor shall obtain the most recent version of
 the QI software and perform elementary checks of the software to document any coding
 changes from the prior versions used in the Reports. The Contractor shall discuss with
 AHRQ whether changes to the most recent versions of the QI software justify using the
 latest version or whether it would be appropriate to continue with the versions used in
 previous Reports, in order to save the expense of running all back years of data. If
 using updated QI software, the Contractor shall need to obtain the updated risk
 adjustment variance-covariance matrices from AHRQ QI program staff.

- New QI measures: It is anticipated that new QI measures will be developed over time.
 These may include measures developed to cover aspects of care not covered by current
 QIs as well as aggregate measures that summarize care across a number of existing
 QIs. Each year, the Contractor shall discuss with AHRQ staff the addition of these new
 QI measures.
- Table shells: Each year, the Contractor shall review previous Report tables against any proposed design changes and revise the table shells for the Reports as needed. In some instances the table shells will be expanded. In other instances the titles, footnotes, or row labels may be revised (e.g., if new QI software includes new or revised measures). Revised table shells will be provided to AHRQ for review before they are finalized for production. Templates for the tables are available for review. http://www.ahrq.gov/fund/contarchive/rfp060009.htm

Each year, NHQR tables will include:

- A national longitudinal table of QIs over time (Table A on "Example NHQR-NHDR Tables)
- A State-level table of QIs for the most recent year of data (Table B on "Example NHQR-NHDR Tables)
- A national table of the two most recent years of data (Table C on "Example NHQR-NHDR Tables), including subgroups defined by
 - Patient characteristics (age, gender, median income of patient ZIP code of residence, urban-rural location of patient residence, region of the country, expected primary payer)
 - Hospital characteristics (region of the country, ownership, teaching status, urban/rural location, bed size)

Each year, NHDR tables will include:

- A race specific table for two years of data by the NHQR subgroups (split into Tables D & E (on "Example NHQR-NHDR Tables) because of size)
- A national table that lists adjusted rates and standard errors for the most recent year of NIS and NHDR analysis file by the NHQR subgroups (Table F on "Example NHQR-NHDR Tables)
- o A summary all-QI tables of relative rates for minorities relative to white subgroups

Composite measures:

- Each year, the Contractor shall meet with AHRQ staff to determine the objectives and status of their internal plans for composite measures.
- Upon approval of the methods, the Contractor shall apply the algorithms to the HCUP NIS and NHDR analytic file QI estimates.

C.28.2. NHQR/NHDR Production

The production process involves assembling the different data sets needed for the project, adding the necessary additional data elements to the HCUP databases, organizing the data steps to generate QI estimates using three separate QI software modules split into discharge-

based and population-based indicators, producing the estimates, and applying quality control measures to ensure accurate statistical tables. The 3M APR DRG version applicable to the QI software must be installed on the SID for this task so that appropriate risk adjustment can be applied for the IQIs. In addition to data processing jobs, area-population counts must be obtained from external sources for every reporting category used in the NHQR and NHDR and for every risk-adjustment stratification category used in the AHRQ QI software. These population counts, which must be updated each year, also must be reconfigured for any new or revised reporting categories of the NHQR and NHDR (such as for new geographic location or race categories). These external population counts are used for denominators to generate the national and state QI estimates. Each year, planned decisions that will affect this process include two types of activities:

New general data preparation activities:

- Weight generation for the SID data
- Creation of the NHDR analytic sample
- Incorporation of population denominator counts

New programming code activities for generating estimates:

- New code for any new subgroups
- New code for disease-specific denominators if feasible

The production task per se is a very large data processing effort because of the many data sets with millions of records each that must be prepared to generate the AHRQ QI estimates for the Reports. To meet the deliverables schedule, the Contractor is expected to begin the data preparation for the NHQR and NHDR analyses using the SID prior to the completion of the NIS file. For example, to meet the deliverable date for working tables in the fall of 2007, preparation of the 2005 SID for this task will begin in early 2007 prior to the completion of the 2005 NIS which occurs in the summer of 2007. Specific steps include:

C.28.2.1. Generating Hospital Weights

Each year, the Contractor shall limit hospitals in the SID to community, non-rehabilitation hospitals so that the statistics will be comparable to the national data. The Contractor shall then create discharge weights for the SID data so that all community, non-rehabilitation hospitals in the State are accounted for against the national Annual Survey of Hospitals conducted by the American Hospital Association. This is necessary to ensure comparisons of similar hospital universes across the States. While the AHA may not accurately represent all hospitals in all States, it is the only national source that provides enough specificity on hospital characteristics to facilitate stratified sample weighting consistent with the sample designs of the NIS and the NHDR analytic sample.

C.28.2.2. Creating the NHDR analytic sample

Each year, the Contractor shall build an NHDR analytic sample from the SID similar to the databases built for previous NHDRs. Building a new analytic sample annually is consistent with the approach that HCUP uses for the NIS. The NHDR analysis file also will be sampled from community, non-rehabilitation hospitals.

C.28.2.2.1. Build NHDR Analytic Sample

Each year, the Contractor shall build an NHDR analytic sample from the SID for States that provide relatively detailed information on patient race (i.e., they code White non-Hispanic, African American non-Hispanic, Asian/Pacific Islander non-Hispanic, and Hispanic). For the 2002 data year this was 22 states. This file will incorporate:

- States with a minimum proportion of discharges with race/ethnic coding (other than "other race") potentially weighted to the nation.
- Hospitals with "good" race data, defined in terms of missing, "other", and percent of discharges in "one" race category.
- The NIS sample design approach.

C.28.2.2.2. Evaluate NHDR Analytic Sample

After the sample is constructed it should be evaluated against MedPAR and NIS data. If the evaluation does not show good representation by race/ethnicity across regions of the country, then the Contractor shall propose an alternate approach that may include the development of an aggregate State database. The evaluation will include:

- Testing of the NHDR analytic sample against the MedPAR to validate the racial/ethnic counts of discharges – a table by race/ethnicity (in columns) and the top 25 DRGs (in rows) containing the number of discharges.
- Comparing the distribution of discharges in the NHDR analytic sample against the NIS by age, gender, payer, race, and the top 25 DRGs.

C.28.2.3. Incorporating Population Denominators

Each year, for the population-based QIs, the Contractor shall obtain geographic population data from an external source such as Claritas. Claritas uses intra-census methods to estimate ZIP-Code-level statistics. ZIP-Code-level counts are necessary for statistics by median household income and location of the patient's ZIP Code. Within ZIP Code, Claritas population files also contain population counts by age, gender, and race. Claritas race categories are more specific than the race coding in the HCUP data files. Claritas includes White (Hispanic and non-Hispanic), Black (Hispanic and non-Hispanic), Asian/Pacific Islander (Hispanic and non-Hispanic), American Indian (Hispanic and non-Hispanic), 2 or more race (Hispanic and non-Hispanic), and Other (Hispanic and non-Hispanic). To make the Claritas race categories consistent with the HCUP race coding, the Contractor shall need to proportionally allocate the "mixed" race population estimates into the "only" race categories (excluding any race combined with Hispanic). Disease-specific denominators will not be obtained.

Claritas has been the source of these population data in the past, but the Contractor may recommend, and with AHRQ's approval, may use data from another vendor if it is advantageous to HCUP and the NHQR and NHDR analyses. (Note that the ZIP-code level data is also used to create the NIS, see Section C.9.1.3.)

C.28.2.4. Reporting on American Indian/Native American

AHRQ uses Indian Health Service (IHS) hospital discharges to make estimates of AHRQ QIs for the NHDR. Each year, the Contractor shall support the development of three sets of estimates:

- AHRQ QI rates for the American Indian and Alaska Native (AI/AN) population in IHS hospitals
- AHRQ QI rates for the AI/AN population in U.S. community hospitals (a weighted HCUP-based estimate)
- AHRQ QI rates for the AI/AN population combined across both settings IHS and community hospitals

The data sets to support these analyses will be in addition to the standard NHDR analytic file which includes Al/AN in the "Other" race/ethnicity category. AHRQ will provide the Contractor with a copy of the IHS data. The Contractor shall format the IHS data for ease of processing, and apply the necessary software (e.g. APR-DRG and AHRQ QI software) to the IHS data to develop estimates.

The purpose of these estimates is to provide 1) IHS with a set of estimates that they can use for their own internal policy discussions and decisions, 2) AHRQ with a set of estimates consistent with the previous NHDR estimates that were developed but not reported in those earlier editions of the NHDR and to provide the IHS with a set of community-hospital comparisons to IHS hospitals, and 3) a set of estimates for the entire Al/AN population that can be reported in the NHDR, if feasible. It is also possible that AHRQ and the IHS may decide to report some measures separately for the two hospital settings.

C.28.2.5. Applying QI Software

Each year, the Contractor shall undertake three steps in applying the QI software: 1) apply the most recent revision of the AHRQ QI software to the data sets, appending the indicators to each discharge record, 2) add the population denominators from various sources, and 3) calculate the rates and standard errors for each cell of each table shell. The standard errors will account for the sample design effects of the NIS and the NHDR analytic sample.

C.28.2.6. Applying Significance Testing

Each year, the Contractor shall apply significance tests to compare rates across subgroups and across years within subgroups as designed for previous Reports. Significance testing will use SAS PROC SURVEYMEANS to take account of the complex sampling design of the NIS and the NHDR analytic sample, when appropriate. For the risk-adjusted discharge-based IQIs and PSIs, the Contractor shall use the variance covariance matrices to calculate standard errors that account for the modeling error.

C.28.2.7. Quality Control

During each step of this task, the Contractor shall apply quality control measures to ensure that the file-building, statistical processing and table production result in accurate statistical tables.

C.28.3. NHQR/NHDR Products

C.28.3.1. Working Tables

Each year, after SAS production runs are completed, the Contractor shall transfer output from SAS printouts into Excel "working" tables. These tables will be delivered to AHRQ by posting them on the HCUP-US website in the "HCUP Team" section devoted to the NHQR and NHDR. There are approximately 74 QIs and 7 table formats for each QI yielding a total of roughly 518 working tables (not counting the special AI/AN tables). These working tables include the key components of the QI rates (numerators, denominators, standard errors, p-values for prespecified comparisons for both the observed and adjusted rates) and alternate specifications of variables that do not apply to every QI (alternative age groups). Subsets of these working tables eventually will feed into Word manuscripts for the NHQR and NHDR. The Contractor shall use automated data transfer to avoid transcription errors from SAS to Excel to Word and to facilitate repeating analyses if any data processing errors are detected along the way. Automated transfer also increases the efficiency of performing this work annually for the NHQR and NHDR.

C.28.3.2. Final Tables

Each year, the contractor also will prepare streamlined "final" tables for all QIs. In addition, the Contractor shall check all labels, titles, and footnotes for accuracy. The tables will be delivered electronically. The final tables will be part of the technical appendices for the Reports, prepared by AHRQ.

C.28.3.3. SID and NIS NHQR/DR Skinny Files

Each year, the Contractor shall develop and deliver electronically a subset of the SID and NIS data processed under this task. The SID and NIS "skinny" files will contain all of the data elements generated for QI calculations, along with SID and NIS linkage variables. These files support AHRQ researchers in other projects involving the AHRQ QIs. The Skinny files will be provided in SAS format. The file documentation will include a brief description of all data elements.

C.28.3.4. Task Documentation

The Contractor shall develop short reports describing the methods used to develop the HCUP statistical tables used in the NHQR and NHDR (a separate report for each). These reports will be made available to the public for those who want information on how HCUP was analyzed for the reports. In addition, the Contractor shall write one report covering both the NHQR/NHDR with detailed technical specifications and notes about the methods for developing the statistical tables. This report is intended primarily for the Contractor and AHRQ's use, but occasionally may be disseminated to those outside AHRQ with an interest in the detailed technical decisions that have been made.

Shown below is a Table 11 outlining the NHQR/NHDR data and report schedule.

Table 11	2008	2009	2010	2011	2012
	NHQR/	NHQR/	NHQR/	NHQR/	NHQR/
NHQR/NHDR Data and Report Schedule	NHDR	NHDR	NHDR	NHDR	NHDR
	Due	Due	Due	Due	Due
	Date	Date	Date	Date	Date
Skinny files and documentation of data for Reports	8/31	8/31	8/31	8/31	8/31
	2007	2008	2009	2010	2011
NHQR/NHDR Estimates Working Tables (excluding Al/AN tables)	9/30	9/30	9/30	9/30	9/15
	2007	2008	2009	2010	2011
Short methods reports describing NHQR/NHDR table production	11/30	11/30	11/30	11/30	9/15
	2007	2008	2009	2010	2011
Al/AN tables of rates and documentation for NHDR	1/15 2008	1/15 2009	1/15 2010	1/15 2011	
Final NHQR/NHDR Tables	1/15 2008	1/15 2009	1/15 2010	1/15 2011	
Technical specifications report, computer programs, and program documentation for Reports	2/28	2/28	2/28	2/28	9/15
	2008	2009	2010	2011	2011

C.28.4. Special Analyses

The Contractor shall conduct special analyses or respond to special requests related to HCUP data or HCUP Partners under the direction of AHRQ staff. About six of these analyses are anticipated per year. Special analyses will evolve from several sources: 1) insights gained from work on estimates for the NHQR/NHDR, 2) directly from AHRQ staff questions aimed at creating the best estimates possible for the NHQR-DR, 3) indirectly from other work on the HCUP data. Examples of special analyses conducted in the past, and possible ideas for the future, include the following:

Development of an aggregate measure of patient safety derived from the Patient Safety Indicators (PSIs).

Perform power analysis of racial and ethnic HCUP data in the NHDR to determine if the sample sizes are sufficient for specific comparisons.

Development of resource guides for particular audiences, as in AHRQ's Diabetes and Asthma Resource Guides for State Leaders (see http://www.ahrq.gov/qual/diabqguide.pdf). These guides provide extensive analyses of data (both HCUP and non-HCUP) derived from the NHQR/DR measures to assist states to carry out quality improvement strategies. The guides could be developed for other diseases, e.g. heart disease, and other audiences, e.g. employers.

Produce State Reports: These reports (See www.qualitytools.ahrq.gov/qualityreport/2005/state)

were initiated in 2004 and will be produced every year. These reports are "mini" NHQRs, one for each state, which present the actual state estimates compared to benchmarks. The contractor will work with AHRQ to repackage the state-level information (both HCUP and non-HCUP) from the NHQR/NHDR for state-level reporting. AHRQ will provide the Contractor with electronic files containing all state-level estimates in the NHQR. Repackaging will include some

additional analyses, such as calculating benchmarks. The State Reports will continue to be posted on the Quality Tools Website, although the format and content may vary from year to year. For the first year (2004), the reports included State rankings on selected measures, state summary tables, and state "snapshots" which provided detail on opportunities for quality improvement. The report formats changed for the 2005 reports to include a more graphical presentation and additional information, specifically on trends. (Note that tasks and costs of posting the reports on the Quality Tools Website will be performed by a separate contractor.)

State Reports—new variations. As additional quality measures are included in the NHQR, there is great opportunity to produce new derivative versions/foci of the state reports for states. In addition, there may be special analyses of HCUP state information included in the NHQR to support special AHRQ initiatives aimed at improving quality and quality measurement.

For any of these special requests, the Contractor shall consult with AHRQ on the topics to be explored. The Contractor shall provide a draft list of potential analyses and timelines. Once a topic has been agreed upon, develop a design to answer the question, identify data sources, conduct quantitative analyses, and interpret the results in a memo, manuscript, or incorporate the results in written documentation, depending on AHRQ's intended uses of the results.

For the purpose of this proposal, the bidders should assume that the 6 special analyses each year will consist of the state reports (considered one analysis), one new resource guide and four analyses that are moderate in size; the equivalent of a power analyses of measuring racial disparities for each of the QIs.

C.28.5. Coordination with HCUP Partners on the NHQR/NHDR

The Contractor shall perform the activities and develop the products below to assist the HCUP Partners in understanding and using the NHQR.

C.28.5.1. Prepare State-level Preview Materials for the HCUP Partners

The Contractor shall prepare materials and provide State-level PQI, PSI and IQI results for Partner review at the annual HCUP Partners' meeting in a way that maintains the confidentiality of States' identities through masked identifiers. The Contractor shall discuss these materials with the Partners at the Partners' meeting. These materials will include:

- State-level PQI analysis
- State-level PSI analysis
- State-level IQI analysis
- State Fact Sheet of demographic and environmental factors that may affect state-level results (see Appendix B of the report at http://www.hcupus.ahrq.gov/reports/2004_07.pdf)
- Other materials to support the Partners' use of the NHQR and NHDR.

AHRQ will provide the Contractor with all HCUP-based state and national QI statistics prepared for the 2007 NHQR and NHDR for preparation of materials for the HCUP Partners' meeting in the spring 2007. (Statistics for the following years will be produced by the Contractor as described in previous sections).

C.28.5.2. NHQR/NHDR Briefing Materials for HCUP Partners

Prior to the annual release of the NHQR and NHDR, the contractor will work with AHRQ staff to prepare a list of briefing items for the Partners. AHRQ will provide the Contractor with materials prepared for the release of the 2005 NHQR and NHDR to use as a starting point: A list of questions that the Partner organization may be asked by their local constituents and draft responses; a document analyzing the AHRQ QIs to assist the Partners in interpreting their QI results (in relation to the national and regional estimates); press release materials on the NHQR and NHDR. In addition, the contractor will design a set of tables that Partners could use to present their own results separately in comparison to national and their regional rates across all the PQIs, IQIs, and PSIs. For the 2006 and 2007 reports briefing materials, AHRQ will provide the Contractor with all HCUP-based national and state statistics developed for those reports.

C.28.5.3. Additional Communication with HCUP Partners.

The contractor will prepare and send a letter to the Partners which inquires if they would like to volunteer to have their state-specific QIs included in the NHQR. The contractor will respond to individual requests by HCUP Partners for assistance in understanding their state's QI results. At AHRQ's direction, the contractor will also prepare the necessary materials and conduct special Partner workgroup conference calls to facilitate the understanding of the state-level QI results. The Contractor should assume that there will be two conference calls per year. The Contractor shall provide AHRQ with a list of Partners who have volunteered for the NHQR.

C.28.5.4. Involve all Partners in the Final Review

Prior to the release of the NHQR/NHDR reports, the contractor will share the sections of the draft reports that include HCUP state-level information with the HCUP Partners who agreed to provide state-level statistics to the reports. The contractor will collect feedback from the HCUP Partners and modify the text/graphics appropriately.

C.29. CONFIDENTIALITY AND SECURITY PROTECTIONS

The Contractor shall protect the security and confidentiality of HCUP databases, project files, and any individually identifiable information associated with the project. The Contractor shall develop procedures and mechanisms that shall adhere to all Federal, Department of Health and Human Services, and AHRQ IT security and confidentiality regulations. The Contractor shall also take other steps that are deemed necessary by the Project Officer to adequately protect data confidentiality.

C.29.1. Become Familiar with all HCUP Confidentiality and Security Provisions

AHRQ is authorized to obtain data for research purposes "to enhance the quality, appropriateness, and effectiveness of health services." AHRQ is also charged with promoting the protection of individually identifiable patient information used in health services research and health care quality improvement.

² Amendment to Title IX of the Public Health Service Act, the Healthcare Research and Quality Act of 1999, P.L. 106129

The identities of patients and physicians who might be included in the HCUP databases are protected from disclosure by the statutes that govern the activities of AHRQ. Additionally, AHRQ excludes identities of patients and physicians from publicly released HCUP databases and the HCUP Data Use Agreements (DUA) prohibit users from making any effort to determine the identity of any person contained in publicly released databases (including but not limited to patients, physicians, and other health care providers).

The identity of institutions (e.g., hospitals) included in the HCUP databases are protected from disclosure, according to the laws of the state providing the information, or according to HCUP agreements between the data organization and AHRQ. Permission is obtained from the data organizations to include hospital identification on restricted access public release databases. When such information appears in HCUP databases, it may be used only for the purpose of conducting research, which includes linking institutional information from outside data sets to enhance analysis and aggregate statistical reporting. Additionally, HCUP DUAs preclude using information about individual establishments in the HCUP databases for commercial or competitive purposes involving those establishments, or to determine the rights, benefits, or privileges of those establishments. Users of the data must not identify establishments directly or by inference in disseminated material.

C.29.2. Legal Protections

The statute that governs AHRQ activities (Section 924[c] of the Public Health Service Act [42 U.S.C. 299c-3(c)]), requires that information that might identify an individual cannot be used for any purpose other than the explicit purpose for which it is collected. In the case of the HCUP data, the purpose is limited to conducting research and developing statistical estimates. Information that could be used to identify persons, either those included in the database or those who are the source of information, cannot be released without specific permission from the individual. In addition to the statute that deals specifically with AHRQ, the Agency, like all Federal agencies, must adhere to the protections included in the Privacy Act of 1974 (as amended) (5 U.S.C. 552a). This Act also restricts the use and dissemination of identifiable information and imposes criminal penalties for violations. The Privacy Act is similar to, but not as restrictive as, the specific AHRQ statutory protections.

AHRQ's use of the HCUP data acquired from the data organization is also subject to any other limitations that may be imposed on or by the data organization. Specifically, HCUP shall observe and be bound by any state statutory requirements governing the data organization's release of these data and any additional requirements specified in the HCUP MOA and its addenda between AHRQ and the data organization.

The HIPAA Privacy Rule protects individually identifiable health information by establishing conditions for its use and disclosure by "covered entities." Disclosure of identifiable data from covered entities for the purpose of research is allowed by the Privacy Rule under section 164.502 and 164.512(i). AHRQ and the data organizations currently participating in HCUP, are not covered entities because they do not fit the definition of (1) a health plan, (2) a health care clearinghouse, or (3) a health care provider that electronically transmits health information in connection with standard financial or administrative transactions. However, some HCUP Partners have entered business associate agreements with covered entities, and it is possible that future Partners could be covered entities directly affected by the Privacy Rule.

Contracts between the Federal government and contractors authorized to have access to the HCUP databases contain sections governing the authorized use of data under the contracts.

These sections restrict the publication and dissemination of material derived from the contracts, specify that the contractors have no rights to data collected or developed under the contracts, and specify provisions for debarment should these restrictions be violated.

The Contractor shall review the existing confidentiality statutes and regulations governing AHRQ and contractors to AHRQ. These include but may not be limited to: 1) the Privacy Act of 1974 and the Public Health Service Act (42 U.S.C. 299c-3(c)); 2) the Health Insurance Portability and Accountability Act 3) AHRQ and DHHS regulations; and, 4) HCUP DUAs required of staff and contractors, and MOAs and DUAs in place with Partner data organizations. In some cases, a participating data organization may require a specific security or confidentiality protection.

The Contractor shall retain at least one staff member who has a demonstrated understanding of the HIPAA privacy rule.

The HCUP Project Officer may request that the Contractor review and comment on new legislation or regulation at the state or Federal level which affect data security and confidentiality.

C.29.3. HCUP Security Plan

The Contractor shall develop an HCUP Contractor Security Plan to define the procedures for protection of the security and confidentiality of data in all phases of work. The Security Procedures may vary for data/information with different levels of sensitivity. Procedures that the Contractor shall provide include: 1) physical access to files; 2) back up of files 3) storage of files including location/s application and types of media; 4) network firewalls 5) secure shipping and/or other delivery of data files; 6) password generation and version control 7) encryption or re-identification methods to allow data linkage without identification of individuals on final files; 8) tracking of data files; 9) structure of final data files; 10) disposal of files following completion of the project, or sooner if deemed necessary by the HCUP Project Officer.

C.29.4. Evaluate Mechanisms to Ensure Security and Confidentiality of HCUP Data

The Contractor shall evaluate confidentiality and security protections on an annual basis. The Contractor shall provide a short memo of their evaluation, conclusions, and recommendations for alternative (if appropriate) procedures for securing and storing HCUP data.

The Contractor shall also provide technical assistance to Partners in ensuring confidentiality of patient records (e.g. the Contractor may be requested to provide encryption or re-identification software to Partner organizations to assist in the encryption of patient identifiers prior to the release of data to AHRQ).

C.29.4.1. Conduct Security Audit

The Contractor shall conduct an audit to evaluate the appropriateness and effectiveness of policies and procedures in for protection of privacy, confidentiality, and security of HCUP data including an analysis of the mechanisms used for data transfer and storage. While the audit may include a review of the networking and computer facilities used by the HCUP project, penetration testing, or an active assault on the network and computers is outside the scope of this audit.

The audit should be considered as a preliminary evaluation of basic data security issues and therefore some sources of risk may only need to be evaluated categorically [i.e., significant vs. not significant]. The audit will be conducted by an external subcontractor with expertise in the field of data security.

A report on the results of the security audit will contain at a minimum:

- Effectiveness/ineffectiveness of current data security policy and procedures, including receipt of data, storage, handling printouts, LAN access, remote access, staff knowledge and compliance, data transmission, and loss control
- Security risks not addressed in the report
- If appropriate, how findings compared to standards relevant to general businesses that develop research files for the government
- If significant data security risks are identified by the audit, the report should recommend measures by which such risks can be minimized

C.29.4.2. Annual Security and Confidentiality Evaluation

The Contractor shall evaluate confidentiality and security protections on an annual basis. The Contractor shall provide a memo on their evaluation, conclusions, and recommendations for alternative (if appropriate) procedures for securing and storing HCUP data.

C.29.4.3. Provide Technical Assistance to Partners for Security and Confidentiality of Data

The Contractor shall provide technical assistance to Partners in ensuring confidentiality of patient records (e.g. the contractor may be requested to provide encryption or re-identification software to partner organizations to assist in the encryption of patient identifiers prior to the release of data to AHRQ).

C.29.5. Maintain and Update Electronic Privacy Training Tools

As a result of the HIPAA Privacy Rule, participating data organizations (HCUP Partners) voiced increasing concern over many aspects of data protection. An important area of consideration involves privacy training for all persons given access to HCUP data (both internal and external to AHRQ). Internal users are required to sign a HCUP DUA, and Staff/Contractor Agreement. External users are required to sign an HCUP DUA before receipt of data. The DUA imposes several data use and publication restrictions of a complex nature.

An improved method of privacy training has recently been developed for internal AHRQ staff and Contractors, as well as users who access the data through the Central Distributor. The electronic HCUP Privacy Training Tool and DUA Training Tool http://www.ahrq.gov/fund/contarchive/rfp060009.htm are maintained on CD and on the HCUP-US Web site. The Contractor should familiarize themselves with both training tools. The Contractor shall maintain both of the tools by reviewing the contents yearly and updating as necessary, e.g., text may need to be changed in certain sections, or questions may need revision at the end of the training. The Contractor shall provide a brief memo documenting the yearly review and any updates that are needed.

C.30. PROJECT MANAGEMENT

The Contractor shall develop and implement methods to ensure that project tasks and subtasks are coordinated so that work progresses in an orderly, efficient manner. The Contractor shall develop and implement a method for planning future project activities so that tasks are completed within expected timeframes and budgets. The Contractor shall implement quality control procedures to monitor and evaluate the quality of the products that will be delivered. The Contractor shall document all proposed project management methods and software tools for review by the Project Officer.

C.30.1. Meetings and Conference Calls

The Contractor shall meet with the Project Officer and other individuals designated by the Project Officer for their technical expertise or substantive interest in the project. These meetings will be at designated intervals during the course of the project in the Washington D.C. area and onsite at the Contractor's facility. The purpose of the meetings will be to review the progress of work, specific deliverables, and future plans under the contract.

C.30.1.1. Prepare, Arrange, and Attend an Orientation Meeting

Meet with the Project Officer and HCUP team from AHRQ/CDOM in Rockville, MD within ten working days of the award of the contract. Discussion topics will include, but are not necessarily limited to, the purpose of the project, technical approach, and deliverables and reporting requirements. The result of the meeting will be the development and delivery of a work plan, delivery schedule, timeline, and project management methods for the project. A draft work plan will be due one month after the effective date and a final work plan will be due two months after the effective date.

C.30.1.2. Participate in Conference Calls with the Project Officer

In addition to periodic meetings, the Contractor shall participate in formal conference calls with the Project Officer and other staff as assigned, as frequently as once a week, to review progress, identify problems and discuss possible solutions to problems. In advance of the conference call, the Contractor shall prepare and send an agenda which highlights key activities and any problems encountered by task. The agenda should include a status report of recruitment activities and data processing.

C.30.1.3. Participate in Other Communications with the Project Officer

It is anticipated that less formal communications will also occur on a more frequent basis, as needed between the Project Officer, and other AHRQ staff as assigned, and the Contractor

C.30.1.4. Participate in Annual HCUP Partners Meeting

Once per year, all HCUP Partners will be invited to AHRQ offices to participate in a two or three day meeting during which new approaches and methods will be discussed and the opinions of the Partners will be elicited to provide guidance in directing the project. In addition to the two recruitment task representatives, one senior manager and one senior technical staff person from the Contractor shall be asked to participate in this meeting.

C.30.2. Prepare an Annual Project Management Plan

Prepare and submit an annual project management plan which provides for the budgeting, monitoring, and documentation of all contract activities and costs by major tasks. The plan should include an annual work plan for the tasks to be completed, including an updated delivery schedule and timeline for the project tasks and identify and recommend any changes in approach or process to the creation and management of the HCUP databases and other tasks. The plan should include such items as procedures for ensuring adequate availability of staff, efficient use of computer and programmer resources on each task, the performance of tasks in a timely manner, and procedures for ensuring data security and confidentiality. A draft project management plan and a final work plan will be due at the start of the project and annually thereafter.

C.30.2.1. Annual Site Visit

At the start of contract years 2, 3, 4, and 5, the Contractor shall prepare for and present the project status at an annual site visit with the Project Officer(s). In years 2 and 4, the Project Officer(s) will travel to the Contractor's site and in alternate years, key staff from the Contractors' team will travel to the ARHQ offices to conduct a two day meeting. The meeting will review the previous year's progress of work including successes, problems, solutions and plans for the upcoming year with respect to project budget, staff and other resources, timelines and deliverables.

C.30.3. Progress and Final Reports

Monthly, the Contractor shall submit to the Project Officer written reports describing major activities of the project, beginning one and one half months following the effective date. Each monthly progress report will list, by major task, project activities of the past month, the cost of those activities, the anticipated next month's activities, problems encountered and proposed solutions, milestones, and any other information which has a significant impact on ongoing or planned activities or costs. For certain tasks (to be identified later), costs should be reported by sub-tasks as well. The report should also compare progress and resource expenditures to the original schedule and budget and provide explanations for any variances, assess whether the current total estimated contract cost is sufficient to complete the contract, and describe significant changes in the Contractor's operational personnel. It is anticipated that certain components of project management may require the application of Earned Value Management (EVM - as referenced in section 300.4 of OMB Circular A-11) techniques in future years. The Contractor shall provide EVM management information to the Project Officer to the extent practicable.

Annually, at 6 and 9 months, the Contractor shall prepare an estimate of "cost-to-complete" showing major tasks and subtasks in order to evaluate resources for that year's activities.

The format and delivery mechanism for all monthly, final and other progress reports and contract deliverables shall adhere to any Agency standards and procedures and automated systems and data bases established by the Agency for this purpose. Also, all documentation prepared and delivered in the support of this contract shall be maintained in an electronic document management system (HCUP-US), shall be maintained current throughout the contract life-cycle, and shall be accessible to the government for review at any time during the life of the contract.

The Contractor shall also submit a final report summarizing the work accomplished at the end of the project. This report will include a description of the project overview, database components, a description of all processes used to generate data files, documentation, and summary of all major deliverables under the contract, user support, dissemination, recommendations for future efforts, and other issues as determined in conjunction with the Project Officer.

C.30.4. Project Close-out

At the end of the current contract period, the Contractor should develop a draft transition plan which includes an assessment of all major on-going tasks and their proposed resolution for close-out. The approach for closing out the current contract period should identify which project files, processing programs, software, documentation, and supporting materials should be deleted, archived, or carried forward to the new contract period. The transition plan should also provide for an orderly and documented method for disposition of data files, documentation, the provision of services through the Central Distributor (database sales), the HCUP-US Web site, and Technical Support to HCUP Users. The plan should consider approaches that include transferring HCUP data and activities to AHRQ and a subsequent Contractor, if necessary, during a two-month transition period to overlap with any new contract.

It will also provide for the following:

- security arrangements for ensuring the confidentiality of data,
- methods and physical location for transfer of data files, processing programs, software, and all relevant documentation
- documentation of the procedures followed
- assignment of adequate and specific staff to each task
- estimated costs

For the data specifically, the plan will provide for an inventory of all data files, software, and documentation; security arrangements for ensuring the confidentiality of data; and adequate, staffing of ongoing tasks. Particular attention should be given to the Partner source data. The HCUP Partner MOAs require that all source data will be returned or destroyed 2 years following the completion of the delivery of that data year to ARHQ. At the conclusion of this contract, there will be source data from all partners for several years, given that some of the HCUP source data will not be 2 years old. Therefore, at four months prior to the conclusion of the contact, the Contractor shall provide a table which details all source data that the contractor is storing, a suggested timeline and process for inquiring of the Partners how they would like their source data either transferred or returned in the event of transfer to a new contractor or end of the Project, and a process for secure transfer of all source data that States allow to be transferred. The timeline should allow for any necessary file cleanup. The Contractor shall provide a final memo that details the final outcome of the source data, including verification of destruction where appropriate.

A final plan, subject to Project Officer review and approval, will be prepared and implemented. The Contractor shall provide AHRQ with a compilation of HCUP data files, documentation, and software under this contract for use by AHRQ or a subsequent Contractor.

DEFINITIONS

ANSI X12N (American National Standards Institute)

A set of transaction standards for use with electronic health care claims for HIPAA.

Administrative data

A collection of data that documents services provided by hospitals, nursing homes, and physicians. The data tracks hospital discharge summaries, physician billing claims, and other health related data. Using this data, researchers can study the utilization of health resources over time.

AHAID

Identification number assigned by the American Hospital Association (AHA) to each hospital in the AHA Survey.

Agency for Healthcare Research and Quality (AHRQ)

The lead Federal agency charged with improving the quality, safety, efficiency, and effectiveness of health care for all Americans. As one of 12 agencies within the Department of Health and Human Services, AHRQ supports health services research that will improve the quality of health care and promote evidence-based decisionmaking.

AHRQ Quality Indicators (QIs)

Measures of health care quality that make use of readily available hospital inpatient administrative data. The AHRQ QIs consist of three modules measuring various aspects of quality. Software and user guides for all three modules are available to assist users in applying the Quality Indicators to their own data.

American Hospital Association (AHA)

The national organization that represents and serves all types of hospitals, health care networks, and their patients and communities. Close to 5,000 hospitals, health care systems, networks, other providers of care and 37,000 individual members form the AHA.

American Hospital Association Annual Survey of Hospitals (AHA Survey)

An annual survey of hospitals administered in the fourth quarter of each year to all AHA registered and nonregistered facilities. The survey covers areas related to facilities and services and their use, staffing, finances, and administration. Data from the AHA Annual Survey of Hospitals are used to produce data products such as the AHA Guide and Hospital Statistics. They are also widely used by hospital administrators, academic researchers, and healthcare marketers.

Area Resource File (ARF)

A county-level database with information on health professions, health facilities, hospitals, vital statistics, population and economics, utilization, expenditures, and health professions training. The ARF contains geographic codes and descriptors which enable it to be linked to other files and to aggregate counties into various geographic groupings. With more than 7000 variables for every county in the U.S., the ARF is used for health services research, health policy analysis and other geographic analyses. The ARF is maintained by Health Resources and Services Administration (HRSA).

Ambulatory Surgery (AS) Data

Surgeries performed on the same day in which patients are admitted and released. The State Ambulatory Surgery Databases (SASD) contain the ambulatory surgery data from encounter abstracts in participating HCUP States, translated into a uniform format to facilitate multi-state comparisons and analyses.

BioSense

BioSense is a national initiative housed at CDC to enhance the nation's capability to rapidly detect, quantify, and localize public health emergencies, particularly biologic terrorism, by accessing and analyzing diagnostic and prediagnostic health data. BioSense will establish near real-time electronic transmission of data to local, state, and federal public health agencies from national, regional, and local health data sources.

Centers for Medicare and Medicaid Services (CMS)

US federal agency which administers Medicare, Medicaid, and the State Children's Health Insurance Program.

Central Distributor (CD) – See HCUP Central Distributor

Clinical Classification Software (CCS)

A software system or "clinical grouper" for classifying diagnoses or procedures into a manageable number of clinically meaningful categories. CCS was developed at AHRQ and is available for downloading for use with HCUP and other administrative data.

The Center for Delivery, Organization, and Markets (CDOM)

Organizational unit within the Agency for Healthcare Research and Quality (AHRQ), which manages the HCUP project. CDOM conducts and manages studies of the structure, financing, organization, behavior, and performance of the health care system and providers within it.

The Center for Quality Improvement and Patient Safety (CQuIPS)

Organizational unit within the Agency for Healthcare Research and Quality (AHRQ), which manages the National Healthcare Quality and Disparity Reports. CQuIPS improves the quality and safety of all Americans through strategic partnerships.

Cost-to-Charge Ratio (CCR)

Hospital-level files that convert hospital charges into estimates of cost of production. The CCR are designed to supplement the data elements in the NIS and SID databases. The CCR were developed at AHRQ based on hospital accounting reports to CMS, for use with HCUP and other administrative charge data.

Current Procedural Terminology (CPT)

A listing of descriptive terms and five character identifying codes and modifiers for reporting medical services and procedures performed by physicians. The CPT was developed by the AMA.

Current Procedural Terminology (CPT)/Healthcare Common Procedure Coding System (HCPCS) Code (CPT/HCPCS)

Field for Centers for Medicare and Medicaid (CMS) claims.

Data Development Files

One of the four types of files that make up the HCUP state databases, the Data Development files contain variables used to create synthetic or derived uniform HCUP data elements. They contain the most sensitive patient information, such as unencrypted dates of birth, dates of admission, discharge and procedure dates, and encrypted patient and physician identifiers.

Data Use Agreement (DUA)

A document informing HCUP data users of federal and state limits on disclosure, and prohibiting the identification of individuals directly or by inference. A signed DUA is required for the release of any HCUP database.

Data Years

The years the data in the HCUP databases represent. Databases are usually released 1-2 years after their data years.

Department of Health and Human Services (DHHS)

The United States government's principal agency for protecting the health of all Americans and providing essential human services, especially for those who are least able to help themselves.

Diagnosis Related Group (DRG)

Classifications of patient diagnosis which demonstrate similar resource consumption and lengthof-stay patterns, from a system used by Centers for Medicare and Medicaid for determining payment schedules to hospitals.

DSHOSPID

A data element in the HCUP databases for a type of hospital identifier. The identifier codes are assigned to hospitals by state data organizations.

Effective Date of Contract (edoc)

The date the contract commences.

Electronic health record (EHR)

A longitudinal electronic record of patient health information generated by one or more encounters in any care delivery setting.

Encounter level data

Information about, or resulting from, a contact between a patient and a health care provider. Contains information about costs and services used. Administrative data.

Episode of illness

A sequence of care for a specific medical problem or condition from onset to resolution of the problem. An episode may extend over more than one encounter with physicians, hospital or ambulatory care facility.

Healthcare Cost and Utilization Project (HCUP (pronounced "H-Cup"))

A family of powerful health care databases, software tools and products for advancing research. Sponsored by the Agency for Healthcare Research and Quality (AHRQ), HCUP includes the largest collection of longitudinal health care (inpatient, ambulatory surgery and emergency department) data in the United States, with all-payer, encounter-level information beginning in 1988. HCUP is a Federal-State-Industry partnership that brings together the data collection efforts of State data organizations, hospital associations, private data organizations, and the Federal government to create a national information resource of patient-level health care data.

HCUP Application Kit

The materials and instructions provided to prospective purchasers of the HCUP public release databases available for purchase through the HCUP Central Distributor.

HCUP Central Distributor

The mechanism through which many of the HCUP databases are offered for purchase. Its main functions are to handle inquiries for public files, process applications for purchase, collect data use fees, and distribute products.

HCUP Databases

Longitudinal health care databases, used to identify, track, and analyze national trends in health care utilization, access, charges, quality, and outcomes. HCUP has nationwide and state-specific databases:

- Nationwide Inpatient Sample (NIS) inpatient data from a national sample of over 1,000 hospitals.
- Kids' Inpatient Database (KID) a nationwide sample of pediatric inpatient discharges.
- State Inpatient Databases (SID) contain the universe of inpatient discharge abstracts from participating states.
- State Ambulatory Surgery Databases (SASD) contain data from ambulatory care encounters from hospital-affiliated and sometimes freestanding ambulatory surgery sites.
- State Emergency Department Databases (SEDD) contain data from hospital-affiliated emergency departments for visits that do not result in hospitalizations.

HCUP User Support (HCUP-US)

The Web site designed to answer HCUP-related questions; provide detailed information on HCUP databases, tools, and products; and offer technical assistance to HCUP users. It is at http://hcup-us/home.isp.

HCUPnet

A web-based interactive tool for identifying, tracking, analyzing, and comparing statistics on hospital care. HCUPnet queries generate statistics in a table format using data from the NIS and SID databases for those States that have agreed to participate. HCUPnet is at http://hcup.ahrq.gov/HCUPnet.asp.

Healthcare Common Procedure Coding System (HCPCS)

The standard HIPAA code set for reporting supplies, orthotic and prosthetic devices, and durable medical equipment. In combination with the Current Procedure Terminology Codes (CPT), it is used to report physician and other health care services.

Health Insurance Portability and Accountability Act (HIPAA)

Legislation with regulations divided into four standards or rules: privacy, security, identifiers and transactions and code sets. A provision of this act calls for the Department of Health and Human Services to implement administrative simplification and to protect health information in any form or medium. The purpose of this mandate is to simplify and modernize the health care system by standardizing electronic data interchange, and to protect the security and privacy of the transmitted data.

The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)

The official system of assigning codes to diagnoses and procedures associated with hospital utilization in the United States. ICD-9-CM is based on the World Health Organization's Ninth Revision, International Classification of Diseases (ICD-9).

International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10)

The latest international standard diagnostic classification for all general epidemiological and many health management purposes. ICD-10 is planned as the replacement for ICD-9-CM, volumes 1 and 2.

Intramural SID/SASD/SEDD

HCUP Intramural State Databases consist of the Intramural State Inpatient Database (SID), Intramural State Ambulatory Surgery Databases (SASD), and Intramural State Emergency Department Databases (SEDD). The Intramural State Databases are restricted to use by AHRQ researchers and their contractors.

Kids' Inpatient Database (KID)

One in a family of databases and software tools developed as part of HCUP. The KID is a unique and powerful database of hospital inpatient stays for children. The KID is the only all-payer inpatient care database for children in the United States. It contains data from two to three million hospital discharges for children. The KID is available for 1997, 2000, and 2003.

Major Diagnostic Category (MDC)

A system for further grouping Diagnosis Related Groups (DRGs) into relatively specifically defined interventions and illnesses, typically grouped by body system.

Medical Record Number (MRN)

The current method of identifying a patient and their medical information by the majority of organizations. Each provider organization maintains a Master Patient Index (MPI) and the Medical Record Number is issued and maintained through this index. The MPI usually contains the patient's demographic information such as name, date of birth, address, mother's maiden name, SSN, etc. The Medical Record Number is designed to be unique only within the same organization, with the numbering system, including the content and format of the medical record number, usually being specific to the individual organization.

Medicare Provider Analysis and Review (MedPAR)

A CMS file of records of beneficiaries using hospital inpatient services. Most data elements that will permit identification of beneficiaries are removed.

Memorandum of Agreement (MOA) (or Memoranda of Agreement)

A signed agreement between HCUP state partners and AHRQ. The MOA outlines the responsibilities of each party, specifies data elements that will be provided by the state partner, and identifies the data elements that the state allows AHRQ to release.

National Association of Children's Hospitals and Related Institutions (NACHRI)

An organization of children's hospitals with 194 members in the United States, Australia, Canada, Italy, Mexico and Puerto Rico. NACHRI promotes the health and well-being of all children and their families through support of children's hospitals and health systems that are committed to excellence in providing health care to children.

National Association of Health Data Organizations (NAHDO)

A national, not-for-profit membership organization with a mission to improve health care through the collection, analysis, dissemination, public availability, and use of health data.

National Uniform Billing Committee (NUBC)

A committee of all major national provider and payer organizations, formed by the American Hospital Association (AHA) in 1975, to develop a single billing form and standard data set that could be used nationwide by institutional providers and payers for handling health care claims.

National Center for Health Statistics (NCHS)

The Nation's principal health statistics agency, part of the Centers for Disease and Control, one of the 13 major operating components of U.S. Department of Health and Human Services (DHHS).

National Healthcare Disparities Report (NHDR)

A Congressionally mandated annual report that the Agency for Healthcare Research and Quality (AHRQ) produces on health care disparities. The NHDR and the National Healthcare Quality Report (NHQR) have been designed and planned as companion reports.

National Healthcare Information Network (NHIN)

An Internet-based architecture that links disparate health care information systems together to allow patients, physicians, hospitals, community health centers and public health agencies across the country to share clinical information securely.

National Healthcare Quality Report (NHQR)

A Congressionally mandated annual report that the Agency for Healthcare Research and Quality (AHRQ) produces on health care quality. The NHQR and the National Healthcare Disparities Report (NHDR) have been designed and planned as companion reports.

National Hospital Discharge Survey (NHDS)

A national probability survey on characteristics of inpatients discharged from non-Federal shortstay hospitals in the United States. The survey collects data from a sample of approximately 270,000 inpatient records acquired from a national sample of about 500 hospitals. The survey is administered by the NCHS and based on data from a sample of 525 hospitals in the U.S.

Nationwide Inpatient Sample (NIS)

One in a family of databases and software tools developed as part of HCUP. The NIS is a unique and powerful database of hospital inpatient stays. NIS is the largest all-payer inpatient care database in the United States. It contains data from approximately 8 million hospital stays, all discharge data from 995 hospitals located in 37 States, approximating a 20-percent stratified sample of U.S. community hospitals. NIS databases are available for the years 1998-2003.

Private Data Organizations (PDO)

Non-government, generally non-profit information agencies, such as hospital associations, to which the reporting of state health data is generally voluntary.

Public Health Data Standards Consortium (PHDSC or Consortium)

A national non-profit member-based partnership of federal, state and local health agencies; national and local professional associations; and public and private sector organizations and individuals to promote standardization of information on health and healthcare.

Regional Health Information Organizations (RHIOs)

Health organizations that support state and other regional projects that help harmonize the privacy and business rules for health information exchange. There are over 100 regional projects under way that are funded by the Federal government. Several other projects are being supported by private industry efforts or are substantiated by State Governors and/or state legislation.

Restricted access, public release files (Central Distributor)

Restricted access public release versions of many of the HCUP databases are available to the public through the AHRQ-sponsored HCUP Central Distributor. The content of the restricted access public release versions of the HCUP databases is developed in partnership with the participating data organizations. Because the participating data organizations dictate the release of specific data elements, the data elements on the restricted access public release databases are a subset of the data elements in the intramural databases.

Quality Indicators (QIs) - See AHRQ Quality Indicators

State Ambulatory Surgery Databases (SASD)

Individual state databases containing the universe of ambulatory surgery data from HCUP participating states, translated into a uniform HCUP format. Those data capture surgeries performed on the same day in which patients are admitted and released. SASD databases are available for the years 1997-2003. Composition and completeness of data files may vary from State to State.

State Emergency Department Databases (SEDD)

Individual state databases containing the universe of discharge information on all emergency department visits that do not result in an admission from HCUP participating states, translated into a uniform HCUP format. (Information on patients initially seen in the emergency room and then admitted to the hospital is included in the State Inpatient Databases). SEDD databases are available for the years 1999-2003.

State Inpatient Databases (SID)

Individual state databases containing the universe of inpatient data collected from all community hospital discharges from HCUP participating states, translated into a uniform HCUP format. SIDD databases are available for the years 1990-2003

State Data Organizations (SDO)State-funded data agencies, to which the reporting of state health data is generally mandated by state law.

REFERENCE MATERIALS

Offerors are directed to information about the HCUP procurement at http://www.ahrq.gov/fund/contarchive/rfp060009.htm. Offerors are directed to www.hcup-us.ahrq.gov for general information about HCUP.

APPENDIX A: HCUP Databases

1. HCUP State Databases

HCUP state databases are annual, state-specific files that share a common structure and common data elements. During development, they are subjected to a common set of edits. The uniform format of the HCUP state databases facilitates multi-state comparisons and analyses. Most data elements are coded in a uniform format across all states. In addition to the core set of uniform data elements, the state databases include state specific data elements, data elements available only for a limited number of states, or versions of a core uniform data element using the state-specific coding. Strict policies and procedures are in place to protect privacy and confidentiality.

There are three types of HCUP state databases:

State Inpatient Databases (SID)
State Ambulatory Surgery Databases (SASD)
State Emergency Department Databases (SEDD).

The following is a general description of each database. Detailed information on HCUP databases can be found at the HCUP-US web site (http://www.hcup-us.ahrq.gov/databases.jsp).

State Inpatient Databases (SID)

The State Inpatient Databases (SID) are a collection of state-specific inpatient databases created from data provided by data organizations in participating states. When considered together, the SID encompass more than 90 percent of all hospitals' discharges in the United States.

Researchers and policy analysts use the SID to investigate questions unique to one state; to utilize data elements that are not collected by all States (and therefore not on the NIS); to compare data from two or more states; to conduct market area variation analyses; and to identify state-specific trends in inpatient care utilization, access, charges, quality, and outcomes. The SID are well suited for research that requires complete enumeration of hospitals and discharges within geographic areas or states.

In general, the SID contain the universe of that state's hospital inpatient discharge records. The SID range in size from 60,000 to 3.9 million records. Many states publicly release their SID through the AHRQ-sponsored HCUP Central Distributor.

State Ambulatory Databases (SASD)

The State Ambulatory Surgery Databases (SASD) are a collection of state-specific outpatient databases that capture surgeries performed on the same day in which patients are admitted and discharged in 20 participating states. All of the databases include the universe of ambulatory surgery abstracts from hospital-affiliated ambulatory surgery sites. Some databases also contain ambulatory surgery encounter abstracts from freestanding surgery centers.

Researchers and policy analysts use the SASD to compare ambulatory surgery patterns; to conduct market area research or small area variation analyses; and to identify state-specific

trends in ambulatory surgery utilization, access, charges, quality, and outcomes. The SASD are well suited for research that requires complete enumeration of hospital-based ambulatory surgeries within geographic areas or states.

The SASD range in size from 270,000 to 2.4 million records and vary by state. Many states publicly release their SASD through the AHRQ-sponsored HCUP Central Distributor.

State Emergency Department Databases (SEDD)

The State Emergency Department Databases (SEDD) capture outpatient emergency department encounters (i.e. treat and release) from data organizations in 15 participating states. The SEDD include the universe of abstracts from hospital-affiliated emergency department sites. Encounters in the emergency department which are later admitted to the hospital are captured in the SID.

Researchers and policy analysts can use the SEDD to investigate access to health care in a changing health care marketplace; trends and correlations between emergency department use and environmental events; community assessment and planning; and emerging infections. The SEDD when combined with the SID are well suited for research that requires complete enumeration of hospital-based emergency departments within states.

The SEDD range in size from 1 million records to 1.8 million records. A few states publicly release their SEDD through the AHRQ-sponsored HCUP Central Distributor.

Physician Files

Cleaned and standardized physician files are available for a small number of states. Generally, these files are based on the Medicare Unique Physician Identification Number (UPIN) and provide information on the physician name and specialty code.

2. HCUP Nationwide Databases

HCUP nationwide databases are created from the HCUP state databases by sampling hospitals or encounter records across the participating states. They include comprehensive discharge-level clinical, resource, and demographic information on all patients, regardless of payer, including persons covered by Medicare, Medicaid, private insurance, and the uninsured. Researchers and policy analysts use the HCUP nationwide databases to identify, track, and analyze national and regional trends in health care utilization, access, charges, quality, and outcomes.

Currently, there are two types of HCUP nationwide databases:

The Nationwide Inpatient Sample (NIS) The Kids' Inpatient Database (KID).

The following is a general description of each database.

Nationwide Inpatient Sample (NIS)

The Nationwide Inpatient Sample (NIS) is the largest all-payer inpatient care database in the United States. The NIS contains data on all discharges from about 1,000 hospitals located throughout the country (approximately seven to eight million discharge records per year), approximating a 20 percent stratified sample of community non-rehabilitation hospitals in the United States.

Researchers and policy analysts use the NIS to identify, track, and analyze national trends in health care utilization, access, charges, quality, and outcomes. Its large sample size (more than seven million unweighted hospital records) is ideal for creating national and regional estimates and enables analyses of rare conditions, such as immunity disorders and uncommon cancers; uncommon treatments, such as organ transplantation; and special populations, such as women and children.

NIS data are available annually from 1988, allowing analysis of trends over time, and may be purchased from the HCUP Central Distributor. The NIS underwent a redesign in 1998. In order to facilitate analysis across the entire time period, an alternate set of NIS discharge and hospital weights for the 1988 – 1997 HCUP NIS were developed. These alternative weights account for changes in the sampling and weighting strategy beginning in 1998 and are available for download on the HCUP-US Web site.

Kids' Inpatient Database (KID)

The HCUP Kids' Inpatient Database (KID) is the only all-payer pediatric inpatient care database in the United States, containing data from approximately two million hospital stays. The KID was developed as a "specialized" database that is re-created approximately every three years. The KID contains a sample of discharges from approximately 2,500 hospitals. Within each hospital, 10 percent of normal newborn discharges and 80 percent of other pediatric discharges are sampled.

Researchers and policy analysts use the KID to analyze hospital utilization, charges, quality, and outcomes for children across the United States. Its large sample size is ideal for developing national and regional estimates. Its scope permits analyses of rare conditions, such as spinal cord tumors and congenital anomalies, as well as uncommon treatments, such as bone marrow transplantation and brain surgery.

KID data are available for 1997, 2000 and 2003 and may be purchased from the HCUP Central Distributor. Please refer to Appendix 1, *HCUP Database Availability by Data Organization*, for state-specific information on participation.

3. Other Databases Related to HCUP

Other auxiliary databases are used to augment information in the HCUP state and nationwide databases. Section VII of this document details how the other HCUP databases are constructed. The following is a general description of each database.

Hospital Characteristics

Hospital characteristics such as bed size, ownership, teaching status, location, utilization, finances, and personnel are available from the American Hospital Association's (AHA) Annual Survey of Hospitals. Cleaned and standardized versions of the AHA Annual Survey are prepared for use by AHRQ staff and can be linked to the state and nationwide databases. All the HCUP databases may be directly linked to hospital-level data from the AHA Annual Survey

<u>Demographic Data and Area Characteristics by ZIP Code</u>

The HCUP ZIP Code files provide population data and area characteristics for residential ZIP Codes in the United States. For information prior to 2001, data files were obtained from CACI Marketing Systems. Beginning with data year 2001, population data and area characteristics for residential ZIP Codes in the United States were purchased annually from Claritas, Inc.

Community Information

Community information such as population counts, socio-demographic indicators, and measures of community health care resources are available from the U.S. Census and from the Area Resource File (ARF) of the Health Resources and Services Administration (HRSA). Forecasted population counts and socio-demographic data were purchased from CACI Marketing Systems and Claritas for use by HCUP for non-Census years. The ARF is not one of the HCUP databases, but it may be linked to these databases by the hospital's state county code.

APPENDIX B: File Structure of the HCUP Databases

The structure of the HCUP state databases has evolved over time. Starting with the 1998 data, the structure is unified so that the state databases are more flexible, easier to data process and document, and still adhere to all data confidentiality and security requirements. The structure of the HCUP state databases needs to be flexible because the content and layouts of the data provided by the HCUP State Partners change periodically. Being flexible also allows for the incorporation of state-specific innovations in the coding and availability of data elements. This approach also makes adding or modifying HCUP variables relatively simple because changes are made to one master program, but affect every data type. Furthermore, having data in the same format simplifies documentation because the description of standard HCUP coding will be identical across all HCUP databases.

1. Intramural File Structure of HCUP State Databases

Beginning in 1998, the HCUP state databases are comprised of four types of files: Core, Charges, Data Development, and Hospital. The following table describes the differences in the file structure between pre- and post-1998 files.

HCUP State Databases File Structure			
1998-2004	Description		
Core	The Core files contain data elements that are provided by most data organizations and can be uniformly coded across states. These variables include patient demographics, clinical information, admission type/source, admission/discharge status, charge information, expected payer and linkage variables.		
Charges	Includes data elements related to detailed charges. There are two kinds of charge files. One includes line item detail and the other includes a summary of charges by revenue center code.		
Hospital – Crosswalk	The Hospital Crosswalk files contain American Hospital Association (AHA) linkage data elements that allow the HCUP databases to be used in conjunction with the AHA Annual Survey of Hospitals data files. These files contain information about hospital characteristics		
Data Development	The Data Development files contain variables used to create synthetic or derived uniform HCUP data elements. They contain the most sensitive patient information, such as unencrypted dates of birth, dates of admission, discharge and procedure dates, and encrypted patient and physician identifiers.		

Since the creation of the first HCUP databases, there has been a significant change in the availability and coding of data elements supplied by the HCUP State Partners. The file structure of the HCUP state database beginning in 1998 allows flexibility in adding new variables. Specific data elements are defined in identical ways in all HCUP state databases. Documentation for the variables is simplified because it applies to all state databases.

A description of how the HCUP Databases are built and the uniform coding for all variables in the HCUP state databases can be found in the Overview of HCUP Process and Databases http://www.ahrq.gov/fund/contarchive/rfp060009.htm.

2. File Structure of HCUP Nationwide Databases

The HCUP nationwide databases are developed so that researchers and policy analysts can identify, track, and study national and regional trends in health care utilization, access, charges, quality, and outcomes. Nationwide databases are built from the HCUP state databases by taking a stratified sample of hospitals across the available HCUP states and weighting them to all hospitals in the United States.

The process for creating a nationwide database is the same regardless of the type of database (i.e., the steps to build the KID are the same as those to build the NIS). However, the sampling approach may differ.

File Structure for the Nationwide Inpatient Sample (NIS)

The HCUP Nationwide Inpatient Sample consists of four types of fixed-width ASCII formatted data files:

<u>Inpatient Core File</u> – This file contains all discharges from a sample of short-term, acute care, non-rehabilitation hospitals in participating states. It contains the core data elements such as diagnoses and procedures, patient characteristics, admission and discharge information, length of stay, and charges. The unit of observation is the inpatient stay record. This file is available for all years of the NIS.

<u>Subsample Inpatient Core Files</u> - There are two subsample files, each of which contains a random, non-overlapping 10 percent subsample of discharges from the NIS. These files can be combined to form one 20 percent NIS subsample. These files can be used for testing programs or validating models. The unit of observation is the inpatient stay. These files are available for all years, but will be discontinued in future years.

<u>Disease Severity Measures Files</u> – These discharge-level files contain information from four different sets of disease severity measures: APR-DRGs, APS-DRGs, Disease Staging, and AHRQ Comorbidity Measures. There is one severity measure file for each of the Core and Subsample Core files (three files in total). The unit of observation is the inpatient stay record. The HCUP unique record identifier (KEY) provides the linkage between the Core and Severity Measures files. These files are available beginning with the 2002 NIS.

<u>Hospital Weights File</u> – This file contains one observation for each hospital in the NIS. Each record contains weights (for making national estimates), data elements required for variance calculations, and linkage data elements. The unit of observation is the hospital. The HCUP hospital identifier (HOSPID) provides the linkage between the core files and weights file but it cannot be used to specifically identify a hospital by name. This information is provided in other data elements (such as the American Hospital Association (AHA) identifier) for those hospitals in states that allow disclosure of hospital identity. This file is available in all years.

In addition to data files, there are four different types of documentation and tool files.

<u>Documentation</u> – Complete file documentation, variable notes, summary statistics, and special reports are provided in a series of portable document format (*.pdf) files.

<u>Source code</u> – Source code is provided to load the data from ASCII into both SAS and SPSS. Code is also provided to create a format library in SAS or a variable library in SPSS.

<u>Labels</u> – Labels are provided for the Clinical Classification Software (CCS), and for the Diagnosis Related Groups (DRGs).

File specifications – These files contain record layouts for all files.

File Structure for the Kids' Inpatient Database (KID)

The HCUP KID consists of three types of fixed-width ASCII formatted data files, similar to the NIS, except that there are no subsample files for the KID:

<u>Inpatient Core File</u> – This file contains pediatric discharges sampled from all short-term, acute care, non-rehabilitation hospitals in participating states. It contains the core data elements such as diagnoses and procedures, patient characteristics, admission and discharge information, length of stay, and charges. The unit of observation is the inpatient stay record. This file is available for all years of the KID.

<u>Disease Severity Measures Files</u> – This discharge-level file contains information from four different sets of disease severity measures: APR-DRGs, APS-DRGs, Disease Staging, and AHRQ Comorbidity Measures. The HCUP unique record identifier (KEY) provides the linkage between the Core and Severity Measures files. These files are available beginning with the 2003 KID.

<u>Hospital Weights File</u> – This file contains one observation for each hospital in the KID. Each record contains weights (for making national estimates), data elements required for variance calculations, and linkage data elements. The unit of observation is the hospital. The HCUP hospital identifier (HOSPID) provides the linkage between the core files and weights file but it cannot be used to specifically identify a hospital by name. This information is provided in other data elements (such as the American Hospital Association (AHA) identifier) for those hospitals in states that allow disclosure of hospital identity. This file is available in all years.

In addition to data files, the KID includes four different types of documentation and tool files, just as for the NIS.

<u>Documentation</u> – Complete file documentation, variable notes, summary statistics, and special reports are provided in a series of portable document format (*.pdf) files.

<u>Source code</u> – Source code is provided to load the data from ASCII into both SAS and SPSS. Code is also provided to create a format library in SAS or a variable library in SPSS.

<u>Labels</u> – Labels are provided for the Clinical Classification Software (CCS), and for the Diagnosis Related Groups (DRGs).

File specifications – These files contain record layouts for all files.

APPENDIX C: HCUP SOW List of Options

The following tasks are identified as Options in the SOW and may be considered depending on the availability of funds. Tasks C.8.8 through C.24 are evaluated priced options. Tasks C.24 through C.27 are evaluated unpriced options.

Evaluated Priced Options

C.8.8.	Evaluate the Collection, Processing, Documentation and Delivery Methods for State Databases
C.9.3.4.	Evaluate the Processing, Documentation, and Dissemination Procedures
C.11.	Multi-State and Nationwide Outpatient Databases
C.12.	New Specialized Discharge-level Database
C.14.	HCUP Supplemental / Linkable Files
C.15.8.	Exhibit Booth Representation
C.15.9.	Evaluation of Dissemination Processes and Tracking / Distribution System
C.18.	Improving HCUP Data Through Technical Support for Partners
C.19.3.	Provide Information to AHRQ on Advances in Health Care Information Technology (HIT) Relevant to HCUP
C.21.	Develop Educational Presentations and Training Materials
C.22.3.	Create New Software Tools
C.23.2.	Write Descriptive and Analytic Reports for Multiple HCUP Series
C.23.3.	Assess All Report Series and Recommend an Overall Plan
C.24.	Increase Use of and Impact from HCUP through Outreach
Evaluated	Unpriced Options

- C.25. Translation of Data for Use by Surveillance Data Systems
- C.26. Expansion of HCUP Outpatient Data to Improve Geographic and Demographic Representation and to Improve Timeliness of HCUP
- C.27. Improving Timeliness of HCUP Information through Near Real-Time Streaming of Data from State Data Organizations

ATTACHMENT 2

PAST PERFORMANCE QUESTIONNAIRE

PART ONE: INSTRUCTIONS

The offeror listed below has submitted a proposal in response to the Agency for Healthcare Research and Quality (AHRQ) Solicitation No. AHRQ-06-0009, entitled "Healthcare Cost and Utilization Project (HCUP)." Past performance is an important part of the evaluation criteria for this acquisition, so input from previous customers of the offeror is important. This office would greatly appreciate you taking the time to complete this form. This information is to be provided to Sharon Williams, the AHRQ Contracting Officer and is NOT to be disclosed to the offeror either verbally or in writing. Please provide an honest assessment and return to AHRQ to the address shown below, no later than June 30, 2006 If you have any questions, please contact Ms. Sharon Williams at (301) 427-1781.

Sharon Williams Agency for Healthcare Research and Quality Division of Contracts Management 540 Gaither Road Rockville, Maryland 20850

FAX: (301) 427-1740

NAME OF OFFEROR:	 	
ADDRESS:	 	

Contractor Performance Form

1.	Name of Contractor:
2.	Address:
3.	Contract/Grant Number:
4.	Contract/Grant Value (Base Plus Options):
5.	Contract/Grant Award Date:
6.	Contract/Grant Completion Date:
7.	Type of Contract/Grant: (Check all that apply) ()FP ()FPI () Award Fee () CPFF-Completion () CPFF-Term () CPIF () CPAF () IO/IQ () BOA () Requirements () Labor-Hour ()T&M () SBSA ()8(a) ()SBIR () Sealed Bid()Negotiated()Competitive ()Non-Competitive
8.	Description of Requirement:

CONTRACTOR'S PERFORMANCE RATING

Ratings: Summarize contractor performance and circle in the column on the right the number which corresponds to the performance rating for each rating category. Please see reverse page for explanation of rating scale.

Quality of Product or Service	Comments	0 1 2 3 4 5
Cost Control	Comments	0 1 2 3 4 5
Timeliness of Performance	Comments	0 1 2 3 4 5
Business Relations	Comments	0 1 2 3 4 5

Customer Satisfaction - Is/was the Contractor committed to customer satisfaction?_Yes No Would you use this Contractor again? _YesNo	;
Reason:	

PHONE #-		
MAILING ADDRESS:		_
DATE:		
SIGNATURE OF EVALUATOR:_		
TITLE OF EVALUATOR:	 	
NAME OF EVALUATOR:	 	

Rating Guidelines: Summarize contractor performance in each of the rating areas. Assign each area a rating 0(Unsatisfactory), 1(Poor), 2(Fair), 3(Good), 4(Excellent) 5(Outstanding). Use the following instructions as guidance in making these evaluations.

	Quality	Cost Control	Timeliness of Performance	Business Relation
	-Compliance with contract requirements -Accuracy of reports -Technical excellence	-Within budget(over/ under target costs) -Current, accurate, and complete billings -Relationship of negotiated costs to actual -Cost efficiencies -Change orders issue	-Met interim milestones -Reliable -Responsive to technical direction -Completed on time, including wrap-up and contract adm -No liquidated damages assessed	-Effective management -Businesslike correspondence -Responsive to contract requirements -Prompt notification of problems -Reasonable/cooperative -Flexible -Pro-active -Effective small/small disadvantaged business sub- contracting program
0-unsatisfactory	Nonconformances are jeopardizing the achievement of contract requirements, despite use of Agency resources	Ability to manage cost issues is jeopardizing performance of contract requirements, despite use of Agency resources	Delays are jeopardizing the achievement of contract requirements, despite use of Agency's resources	Response to inquiries, technical/service/administrative issues is not effective
1-Poor	Overall compliance requires major Agency resources to ensure achievement of contract requirements	Ability to manage cost issues requires major Agency resources to ensure achievement of contract requirements	Delays require major Agency resources to ensure achievement of contract requirements	Response to inquiries, technical/service/administrative issues is marginally effective
2-Fair	Overall compliance requires minor Agency resources to ensure achievement of contract requirements	Ability to manage cost issues requires minor Agency resources to ensure achievement of contract requirements	Delays require minor Agency resources to ensure achievement of contract requirements	Response to inquiries, technical/service/administrative issues is somewhat effective
3-Good	Overall compliance does not impact achievement of contract requirements	Management of cost issues does not impact achievement of contract requirements	Delays do not impact achievement of contract requirements	Response to inquiries, technical/service/administrative issues is usually effective
4-Excellent	There are no quality problems	There are no cost management issues	There are no delays	Response to inquiries, technical/service/administrative issues is effective

⁵⁻Outstanding. The Contractor has demonstrated an outstanding performance level that justifies adding a point to the score. It is expected that this rating

will be used in those rare circumstances where Contractor performance clearly exceeds the performance levels described as "Excellent."

ATTACHMENT 3 0348-0046

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

(See reverse for public burden disclosure.)

1. Type of Federal Action:	2. Status	of Feder	al Actio	n:	3. Report Type:
4. Name and Address of Reporting Er	E	5. If Rep Inter Nam	_	ntity in No. 4 is Subawardee, and Address of Prime	
Congressional District, if known	ı:		Congres	sional Di	strict, if known:
6. Federal Department/Agency:		7	7. Federa	l Program	n Name/Description
		С	CFDA Numb	er, if ap	pplicable:
8. Federal Action Number, if known:	:	9). Award \$	Amount, i	f known:
10. a. Name and Address of Lobbying (if individual, last name, f			address i	f di	Forming Services (including afferent from No. 10a) arst name, MI)
(attach Sheet(s)	Continuation	on S	SF-LLL-A,	if neces	ssary)
11. Amount of Payment (check all th	nat apply):	1	3. Type	of Paymen	nt (check all that apply):
\$	planned	[] a.	retainer	
12. Form of Payment (check all that	apply):		b.	one-time	fee
a. cash				commissio	on
b. in-kind; specify: nature			d. contingent fee		
		- L	e. deferred f. other; specify:		
				other; sp	pecity:
14. Brief Description of Services officer(s), employee(s), or Member(_
(attach Co	ontinuation	Sheet(s) SF-LLL-	-A, if neo	cessary)
15. Continuation Sheet(s) SF-LLL-A attached:	A	Yes	No		
16. Information requested through this form is author title 31 U.S.C. section 1352. This disclosure lobbying activities is a material representation fact upon which reliance was placed by the tier when this transaction was made or entered into. disclosure is required pursuant to 31 U.S.C. 13 This information will be reported to the Congresemi-annually and will be available for public inspection. Any person who fails to file the redisclosure shall be subject to a civil penalty less than \$10,000 and not more than \$100,000 for failure.			of above This 2. guired not	Print Name: Title: Telephone	e:e
Federal Use Only					ed for Local Reproduction FormLLL

DISCLOSURE OF LOBBYING ACTIVITIES CONTINUATION SHEET

Approved by 0

Reporting Entity:	Page	of
		<u> </u>

Authorized for Local Reproduction Standard Form--LLL-A

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee of prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing of attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Use the SF-LLL-A Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

- 1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
- 2. Identify the status of the covered Federal action.
- 3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
- 4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
- 5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.
- 6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
- 7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
- 8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number, Invitation for Bid (IFB) number, grant announcement number, the contract, grant, or loan award number, the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
- 9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
- 10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.
 - (b) Enter the full names of the individual(s) performing services, and include full address if different from 10(a); Enter Last Name, First Name, and Middle Initial (MI).
- 11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material charge report, enter the cumulative amount of payment made or planned to be made.
- 12. Check the appropriate box(es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.
- 13. Check the appropriate box(es). Check all boxes that apply. If other, specify nature.
- 14. Provide a specific and detailed description of the services that the lobbyist has performed, or will be expected to perform, and the date(s) of any services rendered. Include all preparatory and related activity, not just time spent in actual contact with Federal officials. Identify the Federal official(s) or employee(s) contacted or the officer(s), employee(s), or Member(s) of Congress that were contacted.
- 15. Check whether or not a SF-LLL-A Continuation Sheet(s) is attached.
- 16. The certifying official shall sign and date the form, print his/her name, title and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

ATTACHMENT 4

PROPOSAL INTENT RESPONSE SHEET

RFP No. AHRQ-06-0009

Please review the attached request for proposal. Furnish the information requested below and return this page by June 1, 2006. Your expression of intent is not binding but will greatly assist us in planning for the proposal evaluation.

[] INTEND TO SUBMIT A PROPOSAL
[] DO NOT INTEND TO SUBMIT A PROPOSAL FOR THE FOLLOWING REASONS:
QU BI] I GRANT PERMISSION TO THE AGENCY FOR HEALTHCARE RESEARCH AND VALITY, CONTRACTS OFFICE TO ADD THE CONTACT INFORMAION BELOW TO A DDERS LIST TO PROVIDE TO OTHER INTERESTED OFFERORS FOR VBCONTRACTING OPPORTUNITIES. (*MUST INCLUDE AUTHORIZED SIGNATURE)
	COMPANY/INSTITUTION NAME:
	*AUTHORIZED SIGNATURE:
	TYPED NAME AND TITLE:
	DATE:
[] PLEASE <u>DO NOT</u> RELEASE THE CONTACT INFORMATION.
	Please return to: Sharon Williams

Contracts Management

Rockville, Maryland 20850

540 Gaither Road

Agency for Healthcare Research and Quality

Attachment 5

SMALL BUSINESS SUBCONTRACTING PLAN

			DATE OF PLA	N:
CONTRACTOR				
ADDRESS:				
				_
DUNN & BRADSTREET NUMBE				
SOLICITATION OR CONTRACT				
ITEM/SERVICE (Description):				
TOTAL CONTRACT AMOUNT: \$		\$		
	Total contract or Base-Year, if options		Option #1 (if applicable)	
\$	•	\$	(ii applicable)	
Option #2 (if applicable)	Option #3 (if applicable)	·	Option #4 (if applicable)	
TOTAL MODIFICATION AMOUN				
TOTAL TASK ORDER AMOUNT,	IF APPLICABLE\$ \$			
PERIOD OF CONTRACT PERFO	RMANCE (Month, Day & Ye	ear):		
The following outline meets the m implemented by Federal Acquisitions and acquisition of the control of the con	on Regulations (FAR) Subpa	art 19.7. W	hile this outline has been	designed to be
consistent with statutory and reguintended to replace any existing c	orporate plan that is more ex	xtensive. F	ailure to include the esser	ntial information of FAR
Subpart 19.7 may be cause for eir required. "SUBCONTRACT," as u	used in this clause, means a	any agreem	ent (other than one involvi	ng an
employer-employee relationship) supplies or services required for p				
business sources, contact the	Office of Small and Disadva	antage Bu	siness Utilization (OSDB	8U) at (202) 690-7300
or the OPDIV Small Business S PRONET website. Please note t				
30 % for small business (SB),	11 % for small disadvantad	ged busine	ss (SDB), 3 % for Hubz	Zone businesses
(HUBZone),5% for women disabled veteran-owned small bus	-owned business (WOSB), _ siness (SDVOSB) concerns f	_3_% tor	veteran-owned business ((VOSB), and service
proposed subcontracting plans to	contain the following goals,	at a minimi	um,% for small bus	iness,% small
disadvantaged business,% f				
veteran-owned businesses. Thes dollars. The offeror is required t				
NOTE TO CONTRACTORS: Ple	ase provide your CCS numb	per with you	r Dun & Bradstreet numbe	er.
1. Type of Plan (check on	e)			
	al plan (all elements develop	ed specific	ally for this contract and a	oplicable for the full
term of this contract). Master plan (goa	Is developed for this contract	t) all other	elements standardized and	d approved by a lead
	nust be renewed every three			
	ducts/service plan This pla government purposes. Plan			

wide basis rather than for individual contracts. The plan is effective only during the year approved. The contractor must provide a copy of the initial agency approval, and must submit an annual SF 295 to HHS with a breakout of subcontracting prorated for HHS (with a OPDIV breakdown, if possible.)

2. Goals

State separate dollar and percentage goals for Small Business (SB), Small Disadvantaged Business (SDB), Woman-owned Small Business (WOSB), Historically Underutilized Business Zone (HUBZone) Small Business, Veteran-owned (VOSB), Service-Disabled Veteran-owned Small Business (SDVOSB) and "Other than small business" (Other) as subcontractors, for the base year and each option year, as specified in FAR 19.704 (break out and append option year goals, if the contract contains option years) or project annual subcontracting base and goals under commercial plans.

	a.	Total estimated dollar value		ontracting, i.e., with ALL types of concerns under this contract is Year)
FY \$_		_1 st Option FY2 nd Option		
	b.			ed subcontracting with SMALL BUSINESSES (including SDB, a") \$%
FY \$_		_1 st Option FY2 nd Option	FY3 rd Option	FY4 th Option \$
	C.			ed subcontracting with SMALL DISADVANTAGED and% (Base Year)
FY \$_		_1 st Option FY2 nd Option	FY3 rd Option	FY4 th Option \$
	d.			ed subcontracting with WOMAN-OWNED SMALL and% (Base Year)
FY \$_		_1 st Option FY2 nd Option\$	FY3 rd Option \$	FY4 th Option \$
	e.	Total estimated dollar and pe (% of "a") \$		contracting with HUBZone SMALL BUSINESSES:% (Base Year)
FY \$_		_1 st Option FY2 nd Option\$	FY3 rd Option \$	FY4 th Option \$
		estimated dollar and percent of and		ing with VETERAN SMALL BUSINESSES: (% of "a") \$
FY \$_		_1 st Option FY2 nd Option	FY3 rd Option	FY4 th Option \$
	g.			contracting with SERVICE-DISABLED VETERAN-OWNED and% (Base Year)
FY \$_		_1 st Option FY2 nd Option	FY3 rd Option	FY4 th Option \$
	h.		ercent of planned sub	contracting with "OTHER THAN SMALL BUSINESSES":% (Base Year)

FY	_1 st Option	FΥ	2 nd Option	FY_	3 rd Option	FY_	4 th Option
\$	_ ·	\$	· .	\$	·	\$	·

- **Notes:** 1. Federal prime contract goals are: SB equals 30%; SDB equals 11%; HUBZone equals 3%, WOSB equals 5% and SDVOSB equals 3%, VOSB equals 3% and can serve as objectives for subcontracting goal development.
 - 2. SDB, WOSB, HUBZone, SDVOSB and VOSB goals are subsets of SB and should be counted and reported in multiple categories, as appropriate.
 - 3. If any contract has more four options, please attach additional sheets showing dollar amounts and percentages.

Provide a description of ALL the products and/or services to be subcontracted under this contract, and indicate the size and type of business supplying them (check all that apply).

Product/Service	Other	SB	SDB	WOSB	HUBZone	VOSB	SDVO SB

i.	Provide a description of the method used to develop the subcontracting goals for SB SDB, WOSB, HUBZone, and VOSB concerns. Address efforts made to ensure that maximum practicable subcontracting opportunities have been made available for those concern and explain the method used to identify potential sources for solicitation purposes Explain the method and state the quantitative basis (in dollars) used to establish the percentage goals. Also, explain how the areas to be subcontracted to SB, SDB, WOSB, HUBZone, and VOSB concerns were determined, how the capabilities of these concerns were considered contract opportunities and how such data comports with the cost proposal. Identify any source lists or other resources used in the determination process. (Attach additional sheets, if necessary.)
	Indirect costs have have not been included in the dollar and percentage subcontracting goals above (check one).

k. If indirect costs have been included, explain the method used to determine the proportionate share of such costs

	to be allocated as subcontracts to SB, SDB, WOSB, HUBZone, SDVOSB and VOSB concerns.
3. Pro	ogram Administrator:
	NAME/TITLE: ADDRESS: TELEPHONE/E-MAIL:
i.e., de	Does the individual named above have general overall responsibility for the company's subcontracting program, veloping, preparing, and executing subcontracting plans and monitoring performance relative to the requirements e subcontracting plans and perform the following duties? (If NO is checked, please indicate who in the company ns those duties, or indicate why the duties are not performed in your company.)
	Developing and promoting company-wide policy initiatives that demonstrate the company's support for awarding contracts and subcontracts to SB, SDB, WOSB, HUBZone, SDVOSB and VOSB concerns; and for assuring that these concerns are included on the source lists for solicitations for products and services they are capable of providing yes no
	Developing and maintaining bidder source lists of SB, SDB, WOSB, HUBZone, SDVOSB and VOSB concerns from all possible sources; yes no
a.	Ensuring periodic rotation of potential subcontractors on bidder's lists; yes no
b.	Assuring that SB, SDB, WOSB, HUBZONE, SDVOSB and VOSB businesses are included on the bidders' lis for every subcontract solicitation for products and services that they are capable of providing. yes no
C.	Ensuring that requests for proposals (RFPs) are designed to permit the maximum practicable participation of SB, SDB, WOSB, HUBZone, SDVOSB and VOSB concerns yes no
d.	Reviewing subcontract solicitations to remove statements, clauses, etc., which might tend to restrict or prohibit small, HubZone small, small disadvantaged, and women-owned small business participation. yes no
e.	Accessing various sources for the identification of SB, SDB, WOSB, HUBZone, SDVOSB and VOSB concerns to include the SBA's PRO-Net and SUB-Net Systems, (http://www.sba.gov), the National Minority Purchasing Council Vendor Information Service, the Office of Minority Business Data Center in the Department of Commerce, local small business and minority associations, contact with local chambers of commerce and Federal agencies' Small Business Offices; yes no
f.	Establishing and maintaining contract and subcontract award records; yes no
g.	Participating in Business Opportunity Workshops, Minority Business Enterprise Seminars, Trade Fairs, Procurement Conferences, etc;
h.	Ensuring that SB, SDB, WOSB, HUBZone, and VOSB concerns are made aware of subcontracting opportunities and assisting concerns in preparing responsive bids to the company;
i.	Conducting or arranging for the conduct of training for purchasing personnel regarding the intent and impact of Section 8(d) of the Small Business Act, as amended;

	j.		nitoring the company's subcontracting program performance and making any adjustments necessary to ieve the subcontract plan goals;
	k.	Pre	paring, and submitting timely, required subcontract reports;
	I.		nducting or arranging training for purchasing personnel regarding the intent and impact of 8(d) of the Small siness Act on purchasing procedures.
	m.	Cod	ordinating the company's activities during the conduct of compliance reviews by Federal agencies; and
	n.	Oth	er duties:
4.	Equita	able	Opportunity
HU	IBZone,	and	the offeror will Describe efforts Describe efforts the offeror will make to ensure that SB, SDB, WOSB, VOSB concerns will have an equitable opportunity to compete for subcontracts. These efforts include, but o, the following activities:
	a.	Out	reach efforts to obtain sources:
		1.	Contacting minority and small business trade associations; 2) contacting business development organizations and local chambers of commerce; 3) attending SB, SDB, WOSB, HUBZone, and VOSB procurement conferences and trade fairs; 4) requesting sources from the Small Business Administrations (SBA) PRO-Net and SUB-Net Systems, (http://www.sba.gov/) and other SBA and Federal agency resources. Contractors may also conduct market surveys to identify new sources, to include, accessing the NIH e-Portals in Commerce, (e-PIC), (http://epic.od.nih.gov/). The NIH e-Portals in Commerce is not a mandatory source and may be used at the offeror's discretion.
b.	Int	ternal	efforts to guide and encourage purchasing personnel:
		1.	Conducting workshops, seminars, and training programs;
		2.	Establishing, maintaining, and utilizing SB, SDB, WOSB, HUBZone, and VOSB source lists, guides, and other data for soliciting subcontractors; and
		3.	Monitoring activities to evaluate compliance with the subcontracting plan.
	Ac	dditior	nal efforts:

5. Flow Down Clause

b.

The contractor agrees to include the provisions under FAR 52.219-8, "Utilization of Small Business Concerns," in all acquisitions exceeding the simplified acquisition threshold that offers further subcontracting opportunities. All subcontractors, except small business concerns, that receive subcontracts in excess of \$500,000 (\$1,000,000 for construction) must adopt and comply with a plan similar to the plan required by FAR 52.219-9, "Small Business Subcontracting Plan." (Flow down is not applicable for commercial items/services as described in 52.212-5(e) and 52.244-6(c).)

6. Reporting and Cooperation

The contractor gives assurance of (1) cooperation in any studies or surveys that may be required; (2) submission of periodic reports which show compliance with the subcontracting plan; (3) submission of Standard Form (SF) 294, "Subcontracting Report for Individual Contracts," and attendant Optional Form 312, SDB Participation Report, if applicable, (required only for contracts containing the clause 52.219-25) and SF 295, "Summary Subcontract Report," in accordance with the instructions on the forms; and (4) ensuring that subcontractors agree to submit Standard Forms 294 and 295.

Reporting Period	Report Due	Due Date
Oct 1 - Mar 31	SF 294	4/30
Apr 1 - Sept 30	SF 294	10/30
Oct 1 - Sept 30	SF 295	10/30
Contract Completion	OF 312	30 days after completion

Special instructions for commercial plan: SF 295 Report is due on 10/30 each year for the previous fiscal year ending 9/30.

- a. Submit SF 294 to cognizant Awarding Contracting Officer.
- b. Submit Optional Form 312, (OF-312), if applicable, to cognizant Awarding Contracting Officer.
- c. Submit SF 295 to cognizant Awarding Contracting Officer and to the:

Office of Small and Disadvantaged Business Utilization Department of Health and Human Services 200 Independence Avenue, SW Humphrey H. Building, Room 517-D Washington, D.C. 20201

d. Submit "information" copy of the SF 295 and the SF 294 upon request to the SBA Commercial Market Representative (CMR); visit the SBA at http://www.sba.gov/gc and click on assistance directory to locate your nearest CMR.

7. Record keeping

FAR 19.704(a) (11) requires a list of the types of records your company will maintain to demonstrate the procedures adopted to comply with the requirements and goals in the subcontracting plan. The following is a recitation of the types of records the contractor will maintain to demonstrate the procedures adopted to comply with the requirements and goals in the subcontracting plan. These records will include, but not be limited to, the following:

- a. SB, SDB, WOSB, HUBZone, and VOSB source lists, guides and other data identifying such vendors;
- b. Organizations contacted in an attempt to locate SB, SDB, WOSB, HUBZone, and VOSB sources;
- c. On a contract-by-contract basis, records on all subcontract solicitations over \$100,000, which indicate for each solicitation (1) whether SB, SDB, WOSB, HUBZone, and/or VOSB concerns were solicited, if not, why not and the reasons solicited concerns did not receive subcontract awards.
- d. Records to support other outreach efforts, e.g., contacts with minority and small business trade associations, attendance at small and minority business procurement conferences and trade fairs;
- e. Records to support internal guidance and encouragement provided to buyers through (1) workshops,

	business type and size of each subcontractor. (This item is not required on a <i>contract – by – contract basis</i> for company or division-wide commercial plans.)
g.	Other records to support your compliance with the subcontracting plan: (Please describe)
8. Timely	Payments to Subcontractors
payment c concerns,	of amounts due pursuant to the terms of your subcontracts with small business HubZone small business concerns, small disadvantaged small business concerns, bywned small business concerns and women-owned small business concerns.
Your comp	pany has established and uses such procedures: yes no
9. Descrip	otion of Good Faith Effort
owned, ard is a matt contract cobjective shall be faith efformed small s	practicable utilization of small, HubZone small, small disadvantaged, veterand women-owned small business concerns as subcontractors in Government contracts for of national interest with both social and economic benefits. When a cor fails to make a good faith effort to comply with a subcontracting plan, these as are not achieved, and 15 U.S.C. 637(d) (4) (F) directs that liquidated damages paid by the contractor. In order to demonstrate your compliance with a good fort to achieve the small, HubZone, small disadvantaged, veteran-owned and womenall business subcontracting goals, outline the steps your company plans to take. The property will be negotiated with the contracting officer prior to approval of the planes.

seminars, training programs, incentive awards; and (2) monitoring performance to evaluate compliance with the program and requirements;

f. On a contract-by-contract basis, records to support subcontract award data including the name, address, and

SIGNATURE PAGE

Signatures Required:

This subcontracting plan was submitted by: Signature: __ Typed Name: _____ Date: This plan was reviewed by: Signature: ____ Typed Name: Title: Contracting Officer Date: This plan was reviewed by: Signature: Typed Name: ______ Typed Name: Small Business Specialist This plan was reviewed by: Signature: Typed Name: ____ Title: SBA Procurement Center Representative Date: _____ And Is Accepted By: Title:

Date:

Attachment 6

Guidelines for Developing Web-Based Products

Retrofitting Web-based products after the fact is highly undesirable because it adds time and costs to the process of making these products publicly available. All products that are developed with the intent of being posted on the AHRQ Web site should meet the following minimum requirements:

Titles of Products

Coordinate with your project officer on the titles of your products. They need to be concise and relevant to the purpose of the project, but cannot include the name of the contractor or grantee as the performing organization as part of the title. Report titles should be no more than 10-words maximum and Web-based tools should be no more than 5-words maximum (make every word count—eliminate initial articles such as "The" or "A"). Titles need to be distinct enough to differentiate among similar sounding products.

Quality Control/Editorial Review

This involves checking for spelling and grammar mistakes, formatting issues, general consistency, and style. This should be done by the AHRQ grantee or contractor prior to submission of the final product for posting on the AHRQ Web site. Federal resources follow the GPO Style Manual which is available electronically at: http://www.access.gpo.gov/styleman/2000/browse-sm-00.html

Accessibility

As an agency of the Federal Government, AHRQ must ensure that anything that is posted on our Web site is in compliance with requirements for information resources under Section 508 of the Americans With Disabilities Act. Also, federally funded resources need to be generally available to users in multiple formats to ensure that we are not forcing a particular platform, operational system, or software package on users.

Intellectual Property Rights

Before we can post a product on the AHRQ Web site, we must have a written explanation of the following four questions:

- Who retains the copyright?
- Who has licenses for what purposes and uses?
- What are the constraints imposed?
- Who grants permission for further use or adoption?

Technical Assistance

We cannot release a tool without providing the following:

- Written instructions on the use of that tool and what to do if a user encounters problems in accessing and using it.
- A contact name, telephone number, and e-mail address for technical assistance.
- A feedback mechanism for errors, future updates, and revisions.

This information must be provided in writing along with the tool or product to be posted. Provision of technical assistance support should be included in the life-cycle costs of the product.

Source Code

AHRQ's intent is to make tools available to the public, clinicians, health planners and providers, and other Federal, State and local government agencies as appropriate for their intended purposes. Any software and products resulting from these projects should be easily transportable to other users and developers. The best way to ensure adoption and implementation for these audiences is to have a Web-based final product that is platform independent. Coordinate with AHRQ on infrastructure requirements for housing any robust back-end applications before they are developed.

Source code for any technical application must be delivered to the Agency with the product. This provides AHRQ with the knowledge of how the application was created by the original developers and enables the Agency to make corrections, updates, or conversions as necessary to keep pace with technological changes once the products are released.

Usability and Version Control

Web resources should include usability testing, evaluation, and modification as an integral and recurring part of the development effort to ensure they are effective for the electronic business processes they are designed to facilitate. A set of Research-Based Web Design and Usability Guidelines that should be consulted are available at: http://www.usability.gov/pdfs/guidelines.html

Beta testing prior to release is desirable, evaluating the product against usability heuristics. As feedback is received and products are updated, the revisions will need to be designated by version number and date of release.

Privacy Act Protections

Web resources are subject to the Privacy Act and this can impact both the development of Web-based tools and the users of those tools. Persistent cookies should not be programmed into the functionality of a Web-based tool, although session cookies are allowed. Registration for use cannot be requested if this would involve collection of individual identifiers from the users. Although exemptions to both rules can be sought, this involves a strong justification and several levels of review for approval through the U.S. Department of Health and Human Services (HHS).

B.1: Guidelines for New Web Sites

The following list highlights basic issues that need to be addressed when developing Web sites that will be **publicly available** when launched to ensure deliverables are on target, in compliance with legal and policy requirements, and do not require expensive rework to meet Federal and HHS requirements for information resources.

Clearance

Web resources require clearance, minimally by AHRQ, sometimes by HHS--including justification against a set of criteria. Publications cleared for printing are cleared for Web uploading at the same time. Web resources must comply with the numerous laws and directives that affect federally funded electronic information resources. Web content loaded on a site by contractors must be appropriate and follow all laws and directives. AHRQ Offices and Centers must coordinate initial review through AHRQ's Office of Communications and Knowledge Transfer (OCKT) before launch. If any materials are deemed to be sensitive, OCKT will seek departmental clearance.

OCKT responsibility: To initiate clearance for Web sites and Web-based resources as appropriate. Initiating Office or Center responsibility: To ensure that subsequent Web site postings for which they have let contracts are constantly reviewed for appropriateness. If there are any questions about whether such material is appropriate, contact the OCKT Division of Public Affairs for approval.

Domain Names

All domain names for any Web resource funded in whole or in part by Federal funds must be registered as .gov through HHS with the General Services Administration (GSA). Although other domains, such as .org, .net, .edu, .com may also be reserved by the Agency, the .gov domain must be registered and that domain name will need to be indexed by FirstGov, the GSA portal to government-funded resources. The FirstGov link is then required on the home page of the site. Coordinate with OCKT on domain name requests. *AHRQ Chief Information Officer* (CIO) and AHRQ Webmaster (OCKT) responsibility: To obtain approval for domain names.

Editorial Review

All content for upload needs to be reviewed to ensure consistency and compliance with best practices and established style and conventions. As a minimum, the copy needs to be production edited to ensure there are no typos and the GPO Style Manual is followed for punctuation, spelling, use of numerals, abbreviations, etc. Do not

use unexplained acronyms; they need to be spelled out on first reference in any document or file. There should not be anything marked DRAFT on a public site. Once the materials are uploaded, they are published and considered in the "public domain." Do not use placeholders for content that does not exist. Government funded sites should not have anything designated "under construction." A process needs to be established for regular review of content and updating. Additional materials need to undergo editorial review and be approved before uploading. The GPO Style Guide is available electronically as a reference at http://www.gpoaccess.gov/stylemanual/browse.html Contractor responsibility: To comply with GPO Style Manual and AHRO Web site conventions.

Accessibility

Under the Americans With Disabilities Act, Federal agencies have an obligation to provide equal access to the disabled through their Web-based resources. Requirements are specified in section 504 and more recently 508. Development in frames is strongly discouraged because accessibility design requirements might necessitate creating a text or non-frames version of a site developed in frames. Equivalent alternatives are required for auditory and visual information, such as providing alternative descriptive text for images for the blind and providing captions for audio-video files for the deaf. Written transcripts are required for all streaming audio. PDF files can be offered in conjunction with accessible files, such at HTML versions, but avoid uploading PDF-only versions of documents. OCKT has software used to evaluate Web sites and can provide a report on any accessibility violations that would need to be addressed before launch. *Contractor responsibility: To develop Web resources that are 508 compliant and respond to any violations determined during AHRQ assessment of the site.*

Privacy

A privacy policy notice must be prominently displayed, and the Web site host has to follow it. Sites are periodically audited to ensure that they observe their stated privacy policy. A Privacy Act System notice may need to be prepared and published for users to register on a site if the registrations represent a group of records, under the control of the Agency (or a contractor), that can be retrieved by personal identifier. This notice must go through several levels of review--including the Office of General Counsel--and be published in the *Federal Register*. Persistent cookies cannot be used on Federal sites unless the Secretary of HHS grants an exemption, and this involves a strong justification and review process. *Contractor responsibility: To work in coordination with AHRQ staff for submission of the Privacy Act System notice and to adopt or modify the general privacy policy of the AHRQ main Web site. Contractor responsibility: To work in coordination with AHRQ staff for submission of the Privacy Act System notice and to adopt or modify the general privacy policy of the AHRQ main Web site.*

Web Site Mailbox

Every Web site must provide full contact information for the sponsor and have a Contact Us link for submission of comments or questions as a customer feedback mechanism. Web site e-mail is subject to the same privacy and records management issues that affect the overall Web site as well as departmental standards for handling inquiries and customer feedback. Contractor responsibility: To maintain the Web site mailbox according to HHS requirements for response times and confidentiality, to maintain an electronic archives of responses on an annual basis of retention and destruction, and to submit the number of inquiries handled on an annual fiscal year basis to the AHRQ Webmaster to include as Web metrics for Agency reporting under the Government Performance Reporting Act.

Records Management

All content on the site and e-mail generated by the site must be archived electronically and handled according to records retention schedules and disposition authorities as established with the National Archives and Record Administration. This requirement also affects Web site log files and statistical reporting on Web site usage. Contractor responsibility: To comply with the records management requirements of the AHRQ main Web site and to submit Web site usage statistics on an annual fiscal year basis to the AHRQ Webmaster to include as Web metrics for Agency reporting under the Government Performance Reporting Act.

Information Collection Budget

If a Web site is used to collect information from users, such as for surveys or evaluations, then the Office of Management and Budget must first approve the burden hours for such an effort for this collection. A notice must be posted on the Web site at the point of collection with the OMB approval number and a statement on the process of collection. AHRQ project officer responsibility: To submit requests for OMB approval.

Intellectual Property

Copyright and trademark protections need to be observed on Web sites. Permissions for use must be granted for any copyrighted information included and registered trademarks need to be reflected in copy. Any copyright or trademark constraints related to materials uploaded to a site must be specified for users. Public domain does not extend outside the borders of the United States. Therefore, foreign countries must request specific permission for use. Given the global nature of the Internet, citation as to source is a critical issue. Contractor responsibility: To coordinate with AHRQ on permission requests and follow trademark guidelines provided.

Linking

External links constitute an implied endorsement and create a business advantage for the linked sites. OMB requires Agencies to do a risk assessment of external links, and potential links need to be assessed against the HHS and AHRQ linking policies and criteria. If a site deviates from these policies, then the specific review and selection criteria must be justified and posted on the Web site for full disclosure. Outside Web resources may link to Agency resources providing the link is not displayed in any way that would imply an endorsement by the Agency of a specific commercial product or service. *Contractor responsibility: To assess links according to AHRQ linking policy requirements and evaluation checklist provided.*

Electronic FOIA

The Agency is required by law to have an electronic FOIA reading room and to provide materials that can be requested under the Freedom of Information Act in electronic form, if so requested. HHS will normally require that any Web resource funded by the Agency provide a link to the AHRQ electronic reading room, which is housed on the main AHRQ Web site. *Contractor responsibility: To include link to AHRQ electronic reading room.*

Security

Web sites need to be monitored and protected against intrusion and corruption or compromise of content. This is especially critical if there are any business processes involved or financial transactions conducted on the Web site with users. Web resources are periodically audited and evaluated for security by the GSA. Security measures must be specifically delineated for any federally funded Web resources in existence or in development. Any attacks on Web resources must be documented and reported to the HHS Inspector General. **Contractor responsibility: To establish and maintain security according to AHRQ and HHS policies and procedures.**

Usability

Web resources should include usability testing, evaluation, and modification as an integral and recurring part of the development effort to ensure they are effective for the electronic business processes they are supposed to facilitate. Go to http://www.usability.gov as a reference for best practices in initial development or redesign of Web resources. Contractor responsibility: To address usability issues and to work in coordination with AHRQ staff on usability testing.

Web Sponsor Identity

AHRQ has uniform principles to identify AHRQ as the primary sponsor of AHRQ-related Web sites. These principles reflect HHS best practices for a consistent look and feel of Web resources, reinforce credibility, and support HHS and Agency branding efforts. The four specific principles that should be consistent across all AHRQ-funded Web sites are:

- **Web site URL name**: The name of a Web site should always contain AHRQ in the URL. A Web resource should either be a folder on the main AHRQ Web site (www.ahrq.gov/chiri) or a third-level domain of the Web site (www.webmm.ahrq.gov).
- *Title of Web site project:* AHRQ's name should be part of the formal title and appear at the beginning of the Web site's project name. For example: AHRQ's Web Morbidity and Mortality online journal.
- HHS and AHRQ logos: The HHS and AHRQ logos should be featured prominently on the Web site and in materials that are used to market that Web site.
- Web site home page format: The Web site home page should have common design and navigation
 elements with the HHS Portal and the AHRQ Web site so that all Web sites look as though they belong to the
 Department and AHRQ Web family. An HHS Portal Web Development Style Guide is available upon request
 from OCKT to provide technical specifications and templates for developers to consult when designing Web
 resources.

Contractor responsibility: To develop Web resources that are consistent with identity principles and design specifications in coordination with AHRQ staff.

B.2: Additional Information

To discuss specific issues or to get additional guidance on Web requirements, contact:

Gerri Michael Dyer Electronic Dissemination Advisor

E-mail: gdyer@ahrq.gov Phone: 301-427-1898

Biff LeVee AHRQ Web Site Manager E-mail: blevee@ahrq.gov

Phone: 301-427-1897

ATTACHMENT 7

Guidelines for Developing AHRQ Web-based Tools

The Guidelines for Developing AHRQ Tools is based on a conceptual methodology that describes the stages involved in an information system development project, referred to as the Software Development Life Cycle (SDLC).

Planning

Planning focuses on defining the project's objectives, scope, target audiences, deliverables, resources, and schedule. Project planning is the responsibility of the Project Manager or Principal Investigator and takes place initially and throughout the life cycle of the project.

Requirements

This phase involves establishing an understanding and agreement with AHRQ and documenting <u>what</u> the system is supposed to do and the specifications for the tool. These requirements are expected to be managed throughout the life cycle of the project.

Design

This phase describes <u>how</u> the system is supposed to work, including system architecture, development platforms, underlying databases, and user interfaces.

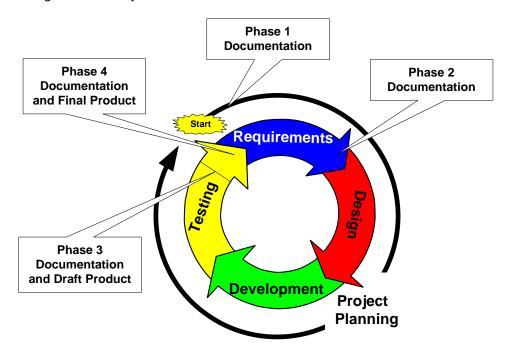
Development

This phase involves the actual development of the prototype, including source code, to ensure compliance with design specifications and usability.

Testing

This phase involves putting the components together and testing the product to demonstrate to AHRQ that it meets the requirements, is error free, and achieves the original objectives of the project. The general types of testing performed are integration, system, performance, and user acceptance testing. Deliverables should be certified as to the quality assurance process undertaken.

The diagram below depicts the phases involved and the allocated documentation AHRQ expects from grantees or contractors throughout the life cycle.



Forms and Checklists

This section contains the forms, checklists, and templates to be completed by the grantee or contractor and submitted to the AHRQ Task Order Officer (TOO) or Project Officer (PO).

Phase 1: Project Planning

Name:

Organization:

Project Name:

Project Manager or

Principal Investigator:

The grantee or contractor will complete a copy of the Project Planning Form at the time specified by the Deliverable Schedule of the SOW.

General Information

	Address						
	Phone N						
	Fax No.	:					
	E-mail:						
		Initial Technical Inforn	nation				
Project End Result:		Software/Web/Multimedia					
(Select as many as	Ш	Hardware	☐ Activity				
apply)		Other:					
If the end result of the project is a software, Web, or multimedia product please complete the following fields in this form:							
Tollowing fields in tills it	<i>7</i> 1111.	T	Development Language Table and				
		Туре	Development Language, Tools, or Software Name				
		Wah Daga/Sita/Link	0011110110				
	Ш	Web Page/Site/Link Web-based Application	Language/Tools:				
		Language/Tools:					
Software Type :	Client-server Application		Language/Tools:				
(Select as many as	PDA-based Application		Language/Platform:				
apply)			Software Name:				
		Spreadsheet	Software Name:				
		Multimedia	Platform:				
		Other:					
Development Type:		Commercial off-the-shelf	☐ Custom built				
(Select one)		(COTS) Product					
Application		Database	☐ CD-ROM				
Components:		Reports/Query Module	□ DVD				
(Select as many as		Peripheral Hardware	☐ Video/Audio Streaming				
apply)		Other	☐ Video/Audio Tapes				

Please note that a mathematical model created in a spreadsheet is considered a software development project.

Project Planning							
Project Objectives:	[Example: The objective of this system is to distribute time-sensitive information to emergency first responders' PDAs and cell phones regarding the Strategic National Stockpile].						
Project Scope:	[Example: The scope of the project will be limited to the following:						
	 Analysis of the requirements and procedures of emergency first responders. 						
	Development and implementation of a system.						
	 Maintenance and hosting of the system throughout the duration of the task order.] 						
Project Assumptions and	[Example: This system will be developed assuming that:						
Constraints:	 All emergency first responders need to have wireless PDAs or cell phones. 						
	 PDAs have to run on Palm x.x and Pocket PC x.x operating system or higher.] 						
Project Risks:	[Example: The risks of this project are:						
	Wireless access for PDAs may not be available in the area where the emergency occurred.						
	After the task order expires the system will not be maintained and data will become outdated.]						
Target Audience:	☐ Clinicians ☐ Consumers						
(Select as many as	☐ Nurses ☐ First Responders						
apply)	Allied Health Professionals Dublic Health Officials						
	Hospitals State and Local Officials						
*(Double click the check	Federal Officials Schools of Public Health						
box to mark your answer)	Congress Civic/Gov't Associations						
	Health Insurers Health Administrators						
	☐ Librarians ☐ Employers ☐ Students						
	Researchers Media/Press						

Phase 2: Requirements

The grantee or contractor will complete and submit a copy of the Requirements Phase Checklist and the Requirements Specifications Template or similar requirements document at the time specified by the Deliverable Schedule of the SOW.

	Requirements Phase Checklist							
#	Evaluation Criteria	Yes	No	N/A				
1.	Are requirements documented?							
2.	Are requirements clear and concise?							
3.	Are requirements testable?							
4.	Are requirements unambiguous?							
5.	Are major product functions summarized?							
6.	Is the system version clearly defined?							
	Detailed Requirements							
7.	Is the user interface clearly defined?							
8.	Are the database requirements complete?							
9.	Are Web hosting requirements identified?							
10.	Are performance requirements clearly identified?							
11.	Are design constraints clearly identified?							
12.	Are usability requirements specified?							
13.	Are security requirements specified?							
14.	Are accessibility requirements clearly identified according to Section 508 of the Americans with Disabilities Act (see Appendix B)?							
15.	Are maintainability requirements specified?							

Use the Requirements Specifications Template provided below or similar document to record requirements.

Requirements Specification Template

Req. ID	Requirement Description	Status	Release Version	Туре	Testing Mechanism
1.	[Example: The system shall be Web-based]	Implemented	1.0	Interface	Logging Test Script
2.					
3.					
4.					

Phase 3: Test Phase

The grantee or contractor will complete and submit a copy of the Test Phase Checklist and Results or similar document as evidence of system testing along with a draft version of the tool or system at the time specified by the Deliverable Schedule of the SOW.

Test Phase Checklist and Results								
#	Verification						N/A	
1.	Has a test environment	t been established?						
2.	Have test scripts been	created?						
3.	Has the product succes	ssfully completed system tes	sting?					
					·			
	Test Environment: Tester Script Number:					Pa	ass/Fail:	
	evision Username: Test Date:							
	Estimated Execution Actual Execution Time:							
Test Objective:								
Test Setup:								
	Test Action	Its Pass	Actual Recui	ts/Comme	nts	Req. ID		
1.						\prod		
-								
		Expected Resul	Ite I	Actual Recui	ts/Comme	nts	Req	

Phase 4: User Manual and Other Technical Documentation

The grantee or contractor will submit a copy of the product user's guide and any other technical assistance documentation such as source code and installation procedures along with a final version of the tool or system at the time specified by the Deliverable Schedule of the SOW.

Attachment 8

RFP Number: Organization: Date:

SAMPLE

BREAKDOWN OF PROPOSED ESTIMATED COST (PLUS FEE) AND LABOR HOURS

COST ELEMENT	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	<u>Total</u>
DIRECT LABOR: Labor Category (Title and Name-use additional pages as necessary)	Hours Amt							
DIRECT LABOR COST: MATERIAL COST:	\$ \$							
TRAVEL COST:	\$	\$	\$	\$	\$	\$	\$	\$
OTHER (Specify)	\$	\$	\$	\$	\$	\$	\$	\$
OTHER (Specify)	\$	\$	\$	\$	\$	\$	\$	\$
TOTAL <u>DIRECT</u> COST:	\$	\$	\$	\$	\$	\$	\$	\$
FRINGE BENEFIT COST: (if applicable)% of Direct Labor Cost \$	\$	\$	\$	\$	\$	\$	\$	
INDIRECT COST:% of Total Direct Cost	\$	\$	\$	\$	\$	\$	\$	\$
TOTAL COST:	\$	\$	\$	\$	\$	\$	\$	\$
FIXED FEE: (if applicable)% of Total Est. Cost GRAND TOTAL EST COST (PLUS FIXED FEE)	\$ \$							